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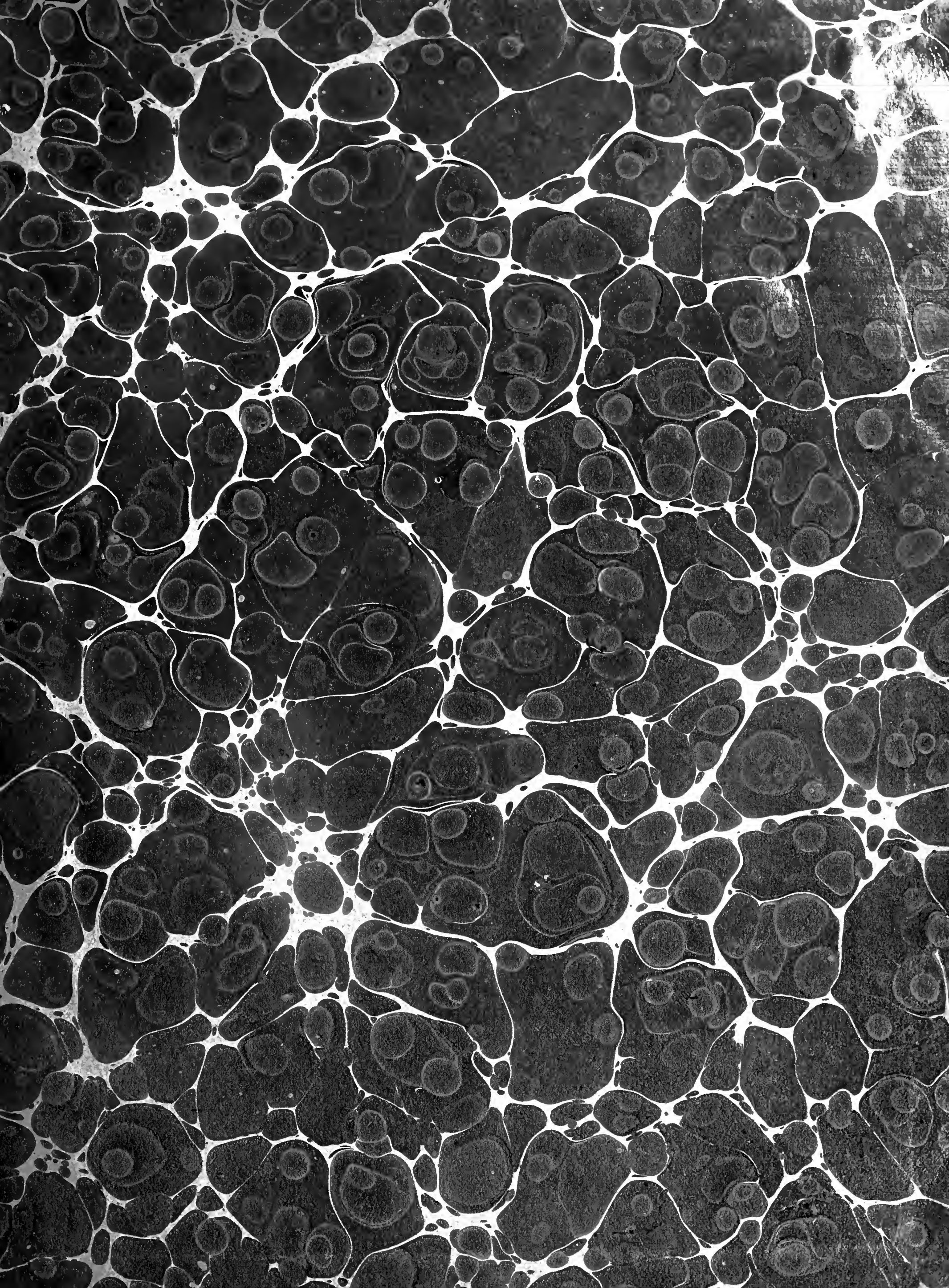
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# THE NATIONAL NURSERYMAN



JANUARY, 1913

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

## THE MONROE NURSERY

Established 1847.

OFFER A GENERAL LINE OF

### Choice Nursery Stock

### CHERRY and STD. PEAR

of Extra Fine Quality.

If you are in the market for superior trees write  
us for prices.

**I. E. Ilgenfritz' Sons Co.**  
MONROE, MICH.

## EVERGREENS

OUR LEADING SPECIALTY

RHODODENDRONS, HEMLOCKS, WHITE  
PINES, BOX BUSH. A general collection  
of specimen ornamentals.

ALSO

NORWAY MAPLES, PIN OAKS, IBOTA  
PRIVET, SPIRAEA VAN HOUTTEI  
by the thousand.

## Andorra Nurseries,

WM. WARNER HARPER, Prop.

CHESTNUT HILL, PHILA., PA.

## MOUNT ARBOR NURSERIES

E. S. WELCH, Proprietor

136 Center St., Shenandoah, Iowa

**APPLE SEEDLINGS**—Fine lot, healthy and free  
from disease. Special low prices until surplus  
is sold.

**APPLE and PEAR GRAFTS**—Made to order.

**APPLE TREES**—in car lots. Large assortment.

**ORNAMENTAL TREES**—in car lots. American  
Ash, American Elm, American Sycamore, Silver  
Maple, Carolina, Norway and Lombardy Poplars.

Complete Line General Nursery Stock for Wholesale Trade.

CORRESPONDENCE AND INSPECTION INVITED

## THE JEWELL NURSERY CO.

*Wholesale Nurserymen*

LAKE CITY, MINNESOTA

Established 1868

1500 Acres

Everything in the line of Nursery Stock  
suited to Northern culture.

*Let us figure with you*

SPRING SHIPMENT

# Direct Importations

from European Nursery Centers

## Boskoop (Holland) Nursery Stock

ROSES (all varieties) Tree Roses, Magnolias, Boxwood in Pyramids, Bushes, Standards, Ball Shape, etc. Koster Blue Spruce, Hardy Azaleas, Evergreens, Paeonies, Rhododendrons, etc., etc.

From the Nurseries of

**SCHAUM & VAN TOL**

**BOSKOOP, HOLLAND**

*Send for special import price list*

## Deciduous Trees

Norway Maples, (500,000 to select from in all sizes, whips to calipered trees) Schwedler Maples, Chestnuts, Tiliacs, Elms, Oaks, Thorns, Planes, etc. Straight stems, good roots, careful packing.

From the Nurseries of

**UNION NURSERIES**

**OUDENBOSCH, HOLL.**

*Send for special import list*

**BAY TREES.** Pyramids, Standards, all commercial shapes. April-May shipment from Belgium.

**IMPORT PRICES** quoted on FRENCH FRUIT and ORNAMENTAL STOCKS; ENGLISH MANETTI STOCKS and GOOSEBERRIES; JAPANESE NURSERY STOCK and HARDY LILIES.

**RAFFIA.** Red Star, XX Superior, Arrow and AA West Coast Brands, also colored. We are headquarters. Can ship any quantity, any grade at a moment's notice.

**SHIPPING.** We have our own Custom House and forwarding department with shipping connections at Havre, Hamburg, Rotterdam, Antwerp, Southampton, etc.

## McHutchison & Co.

17 Murray St.  
New York

The Import  
House.

# SIMPSON

is the name of the men who grow the finest

## CHERRY

that can be produced by suitable soil, climate and expert knowledge.

Take a look at the stock or ask for a sample and be convinced of the extra quality of their

## TREES

PEACH

ST. PEAR

APPLE—1 year, 2 year and 3 year

AMERICANA PLUM ON PLUM

COMPASS CHERRY ON PLUM

## H.M. Simpson & Sons

VINCENNES, INDIANA

## For Winter and Spring Orders

WE OFFER THE FOLLOWING FROM  
OUR MAC CLENNEY NURSERY . . .

4000 Mulberries, mostly of Hicks variety, smooth and free from blight.

15000 Figs, mostly of the Celeste and Lemon varieties.

20000 Peach, in 2 to 3 ft., 3 to 4 ft. and 4 to 5 ft. sizes.

25000 Plum on Plum, Abundance, Burbank, Wickson, Red June, Gonzalez, and other leading sorts. Sizes 1/2, 5/8, 3/4 and 1 inch.

10000 Roses, Teas, Hybrid Teas and Climbers, all grafted very low on Manetti roots. Field grown.

6000 Biota Aurea Nana, sizes 18 inches up.

10000 Biotas and other Conifers, 12 inches and up. Conifers can be balled or shipped with naked roots.

25000 Chinese Arborvitae Seedlings, 2 and 3 year, 6 inch to 3 ft. sizes.

5000 Muscadine Grapes.

20000 Trellis Varieties Grapes.

70000 Camphor Trees, sizes 1 to 3 ft.

3000 Pot Grown Eucalyptus, sizes 3 to 5 ft.

4000 Oriental Plane, sizes from 4 to 12 feet.

3000 Texas Umbrella, sizes from 4 to 8 feet.

2000 Oleander. Field grown. 3 to 5 ft. sizes.

A general variety of Orange and Grape Fruit Trees. Could also supply limited quantities of general list of Fruit and Ornamental Trees to be used to fill in with orders.

*Stock is fine and will be sold at Right Prices.*

## The Griffing Brothers Company

JACKSONVILLE, FLORIDA

# NURSERYMEN AND FLORISTS

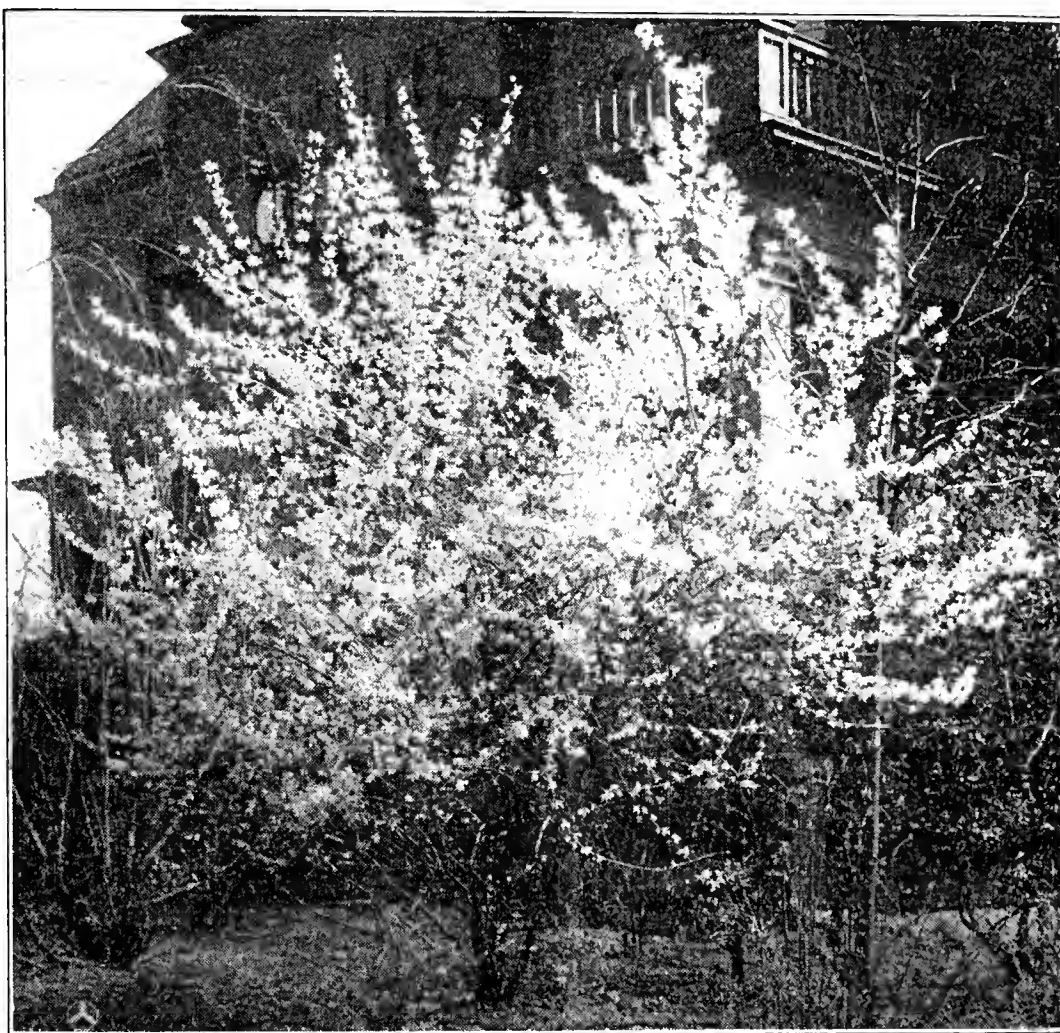
looking for stock can find largest assortment in the United States at the

## Painesville Nurseries

Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses, Vines and Plants, Grapes, Gooseberries, Small Fruits, Bulbs, Seeds, Palms and other tender Greenhouse Plants

Have large stock stored in frost-proof cellars that can be shipped at any time desired; switch from N. Y. C. lines direct into our packing house; can load without exposure. Unsurpassed facilities for handling orders large or small.

== CATALOGS AND PRICE LISTS FREE ==



FORSYTHIA

### A FEW SPECIALS WHILE THEY LAST:

STANDARD PEARS in assortment, DUCHESSE DWARF PEARS, BOURGEAT QUINCE,  
PRUNUS PISSARDI and TRILOBA, CUTHBERT and other Raspberries,  
CONCORD and other GRAPES

### OUR SPECIALTIES ARE

Roses, H. P. Moss, Ramblers, Climbers, etc., Peaches, Pears, Plums, Cherries, Ornamental Trees and Shrubs in car lots, Weeping Mulberries, Elm and Ash, Clematis, Ampelopsis, Paeonies, Hydrangeas, Bush and Tree Perennial Plants.

No Trouble to Price your List of Wants. 59 Years 1200 Acres 44 Greenhouses

## THE STORRS & HARRISON CO.

PAINESVILLE, OHIO



PLANT FOR PROFIT

## Berberry Thunbergii Seedlings

\*\*\*

### California Privet

2 years, cut back, a fine lot  
—and—

### A General Line of Nursery Stock

will be shown in our bulletins issued frequently from January on during shipping season, but remember, WE DO give you good thrifty stock, good grading, good packing.

\*\*\*

## C. R. BURR & Co.

MANCHESTER, CONN.

## TREE LILACS

Grown as STANDARDS with strong, straight stems and well-branched, well-balanced tops; forty varieties, single and double, all shades from purest white to darkest purple. A profitable *specialty* for agency and catalog houses.

**J. & P. Tree Hydrangeas** were the first home-grown standards on the market. Our **Tree Lilacs** are becoming even more popular.

Electros free for use in advertising. Special prices to large buyers of TREE LILACS.

Other shrubs also grown as STANDARDS, like **Snowballs**, **Weigelas**, **Spireas**, **Forsythias**—very special stuff for high-class retail trade. We, ourselves, sell at wholesale only and to nurserymen and florists exclusively.

## Jackson & Perkins Company

Growers of the J. & P. Specialties  
Sold to the Trade only

NEWARK, NEW YORK

### SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY  
PEACH PLUM

A Fine Block of  
Own Root Roses

ORNAMENTAL TREES SHRUBS  
BERRIES CLEMATIS  
EVERGREENS PEONIES PHLOX  
PYRAMIDAL and STANDARD  
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists  
and carload lots.

## W. & T. SMITH COMPANY

GENEVA, N. Y.

63 Years

700 Acres

## Berckmans' Specimens

We never call a tree or plant a "specimen" until it really has earned the title. Our evergreens are transplanted, sheared and root-pruned, each one getting just the proper attention to make it a really handsome and serviceable specimen. It *costs* more to produce such, but it's *worth* it—to us, to you and to your customers.

### Your Trade Will Be Pleased With Them

We offer a select but limited stock at wholesale this year. We call attention to our **Biotas**—**Aurea Nana**, **Aurea Conspicua**, and **Japonica Filiformis** (see illustration); **Retinospora**, **Thuya**, and **Juniper**—all in popular sizes for the trade.

Our **Deciduous Shrubs** include **Exochorda**, **Lilac**, **Spirea**, **Althaea**, **Deutzia**, **Philadelphus**, and a very choice stock of **Teas' Weeping Mulberry**.

**Broad-leaved Evergreens**—**Azalea Indica** (Home-grown Plants) **Magnolia Fuscata**, **Aucuba**, **Ligustrum**, and **English Laurel**. Among our fruits, we direct particular attention to our clean, thrifty **Peach Trees**, of which we offer the the leading sorts.

### WRITE FOR PARTICULARS NOW

Tell us what you need, quantity, etc., and we will quote lowest price possible. Write early and get the best selections from our stock.

**P. J. Berckmans Co.**  
INCORPORATED  
**Fruitland Nurseries**  
AUGUSTA, GEORGIA  
Established 1856. Over 450 acres in  
Nursery.

CONIFERS  
BROAD-LEAVED  
EVERGREENS  
DECIDUOUS  
SHRUBS  
WEEPING  
MULBERRY  
PEACHES  
OTHER FRUITS



Biota Japonica Filiformis.

## The Best Tree Digger on Earth



Used and Recommended by Leading  
Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

**Stark Bros. Nursery & Orchards Co.**

LOUISIANA, MO.

## Hill's Seedling Evergreens

Will help you work up a profitable, permanent business in that line. They are fine, healthy, vigorous little fellows, grown where soil and climate are specially suited to evergreen culture, and with facilities that you could not duplicate unless you were to spend a fortune and a lifetime of study upon this one branch of horticulture—as we have.

## Let Us Have Your Orders —Get Our Catalog NOW

We are in good shape to take care of your wants at prices that will attract you. Evergreen seedlings for nurserymen's trade and lining out are our specialty; we grow millions of them. We'd like you to learn about our stock if you have never had any of it.

Ask for our Wholesale Catalog. Write us your wants.

**THE D. HILL NURSERY CO., Inc.**

D. HILL, President

Box 401, DUNDEE, ILLINOIS

*Largest Evergreen Growers in America*

**L. Spaeth** **BERLIN**  
Baumschulenweg  
GERMANY

## Largest Nurseries in Europe

2000 ACRES

FOUNDED 1720

## HARDY TREES AND SHRUBS

1. Our nurseries lie in a colder climate than the French, Dutch and English nurseries—
2. We grow all the stock we sell—
3. Moderate prices.  
Catalogs free—
4. When in Europe come and see our nurseries—

## Willis Nurseries

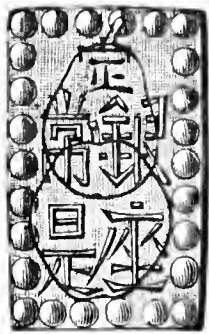
OFFER A GENERAL ASSORTMENT  
OF NURSERY STOCK

Apple, Peach, Cherry  
Kieffer Pear  
Red Dutch Currants  
Silver Maple Shade Trees  
Catalpa Speciosa Seedlings  
Apple Seedlings and  
Japan Pear Seedlings

**A. Willis & Co.**

OTTAWA, KANSAS

## Heikes --- Huntsville --- Trees



**Huntsville  
Wholesale Nurseries**

**Huntsville, Ala.  
JESSIE S. MOSS, Prop.**

We offer for Spring of 1913  
in large quantities as usual:

### SPECIALTIES

**APPLES**—Commercial varieties, one and two year, in large supply. As fine in quality as ever grown.

**PEARS**—Kieffers, one and two years old. A much smaller crop than heretofore.

**CHERRIES**—On Mazzard. Two year, Bing, Lambert, Napoleon, Black Tartarian.

**CHERRIES**—On Mahaleb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.

**PEACHES**—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.

**ROSES**—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.

**PRIVET**—Amoor River (South). Retains its foliage longer and holds its color better than California Privet.

**PECAN SEEDLINGS**—Huntsville grown from selected nuts collected along the Gulf Coast. Thin shell.

See Price List for Particulars.

Address, **HUNTSVILLE WHOLESALE NURSERIES  
HUNTSVILLE, ALA.**

## BOBBINK & ATKINS

**World's Choicest Nursery and Greenhouse Products**

**EVERGREENS and CONIFERS**,  
in several hundred  
kinds and varieties

**ROSES**, in all kinds  
and varieties

**RHODODENDRONS**, Hardy,  
ENGLISH HYBRIDS,  
Maximum and Catawbiense

**BOXWOOD**, in all shapes,  
forms and sizes

**HARDY AZALEAS**, in all  
colors and varieties

**HEDGE PLANTS**, in all  
popular kinds

**FLOWERING SHRUBS**, in  
bush and standard forms  
in hundreds of kinds  
and varieties

**SHADE TREES**, in hundreds  
of useful and attractive  
varieties

**MAGNOLIAS** and other  
FLOWERING TREES

**WEeping and STANDARD  
TREES**, in many varieties

**JAPANESE MAPLES**, in all  
varieties and colors

**HARDY TRAILING VINES  
and CLIMBERS**

**HARDY VINES and CLIMBERS  
in pots**

**SPRING and SUMMER  
FLOWERING BULBS, ROOTS  
and PLANTS**

**PALMS and BAY TREES** by  
the thousands

**FRUIT TREES**,  
home-grown, imported,  
DWARF and TRAINED

**SMALL FRUITS**, in all  
kinds and varieties

**NUT TREES**, profitable  
kinds

**OLD-FASHIONED**, Hardy  
FLOWERING PLANTS, in  
thousands of kinds and  
varieties

**PAEONIAS, IRIS, PHLOX  
FERNS,  
and HARDY GRASSES**

**KITCHEN  
HERBS and ROOTS**

**RUTHERFORD PARK LAWN  
GRASS SEED**

**AUTUMN BULBS**, Dutch,  
French and Japanese kinds

**Interior and Exterior  
DECORATIVE PLANTS**, in  
a large variety

**PLANT TUBS**, in all shapes and  
sizes. Ask for special list

**VISITORS** to our nurseries  
are always welcome

**SEND IN YOUR LISTS FOR  
QUOTATIONS**

**Nurserymen, Florists and Planters  
RUTHERFORD, N. J.**

## Fruit Seeds and Seedlings

**WE** offer a complete list of **FRUIT SEEDS AND  
SEEDLINGS** this year. Send for a copy of  
our list showing varieties, sizes and prices.

## Tree and Shrub Seeds

Send for our complete price list of **DECIDUOUS AND  
EVERGREEN TREE AND SHRUB SEEDS**. It  
contains a full list of varieties and prices.

## Small Stock for Lining Out

Our Price List of Small Stock for lining out in nur-  
sery rows will be ready about **JANUARY 1st**. This  
list will interest every Nurseryman. Be sure and get  
a copy.

**THOMAS MEEHAN & SONS**  
WHOLESALE NURSERYMEN AND SEEDSMEN  
**DRESHER, PA.**

## BRIDGEPORT NURSERIES

*OFFER A GENERAL ASSORTMENT  
OF NURSERY STOCK*

**Apple, Catalpa Speciosa Seedlings**  
**Shade and Ornamental Trees**

**IN LARGE QUANTITY**

WRITE FOR PRICES

**C. M. HOBBS & SONS**  
**BRIDGEPORT, IND.**

# Tree Protection

SCALINE will protect them all seasons of the year.

SCALINE is an oil and sulphur composition, a scalicide, insecticide and fungicide combined—three in one—and it will destroy San Jose, oyster shell, cottony maple, tulip scale, aphids, red spider, thrips, mealy bug and all sap sucking insects.

SCALINE is composed of a high grade petroleum oil and the properties of our fungicide Fungine, thus making it equally effective for the control of various fungi.

SCALINE is used at the strength of one part to twenty parts water for scale; one part to fifty parts for other sap sucking insects. It is readily soluble in water, requires no mixing, and containing no sediment can be applied through the finest spray nozzle.

SCALINE may be used as safely in the growing as in the dormant season. It is an all year round spraying material.

Gallon, \$1.50

Fifty gallons, \$37.50

Ten gallons, \$10

We believe that in SCALINE we have one of the best spraying materials on the market today for general spraying of trees, shrubs and hardy plants. We feel confident that a trial would make you a regular user of this product.

## Aphine Manufacturing Co.

M. C. EBEL, General Manager

Manufacturers of Agricultural Chemicals

MADISON, N. J.

"APHINE"  
Insecticide

"FUNGINE"  
Fungicide

"VERMINE"  
Vermicide

# Oriental Planes All Sizes From 1 $\frac{1}{4}$ to 2 $\frac{1}{2}$ Inch Caliper

Double Flowering Peaches  
Double Flowering Japan  
Cherries, Weeping Japan  
Cherries, Flowering Apples  
Asparagus, strong 2 years  
Large and complete assortment of Flowering Shrubs

## Hoopes, Bro. & Thomas Co.

MAPLE AVENUE NURSERIES  
WEST CHESTER, PA.

PHILADELPHIA

OFFICE:

222-3-4-5 Stephen Girard Bldg.,  
21 So. Twelfth Street

# FOREST TREES FRUIT STOCKS

Shipments of over 200 Million of  
Trees Annually

♦ ♦

## J. HEINS' SONS

HALSTENBEK, No. 152

Near Hamburg, Germany

*Largest Forest Tree Nurseries in Europe.*

Please write for Catalogue and Forest  
Planter's Guide to our American Agent:

OTTO HEINECKEN

Whitehall Bldg., 17 Battery Place  
NEW YORK CITY

Have you seen and examined the quality and  
finish of our

Rawhide Brand of Shipping  
Tags and Tree Labels  
printed or plain, strung or wired?



This stock is especially adapted to the most severe usage, being thoroughly waterproof & weather-proof. "Once used, always used."

Send for samples and prices. Our reference are the largest nursery men in the United States.

## The Denney Tag Co.

WEST CHESTER, PENNSYLVANIA



35TH YEAR  
**Pan Handle Nurseries**

WE OFFER A COMPLETE ASSORTMENT OF NURSERY STOCK CONSISTING OF

Apple	Poplar Carolina	Ampelopsis
Pear	Poplar Volga	Roses
Plum	Elm American	Evergreens
Cherry	Sycamores	California Privet
Peach	Mountain Ash	Buxus
Grape	Althea	Weeping Trees
Currant	Hydrangea	Catalpa Seedlings
Gooseberry	Barberries	Black Locust "
Small Fruits	Syringas	Fruit Tree "
Maple Norway	Clematis	Catalpa Speciosa Seed.
Maple Schwedlers	Honey Suckle	Etc., Etc., Etc.
Maple Silver	Wistaria	

Our stock is well grown and graded. Prices are such that it will pay to investigate. Come and see us or write.

**J. K. HENBY & SON**  
GREENFIELD, IND.

## APPLE TREES

We can supply in carload lots or less, in one or two-year-old, the following in strictly No. 1 Grade:

Ark. Blacks	Newtown
Baldwin	Ortley
Delicious	Spitzenburg
Gravenstein	Wagner

We also supply scions in the above variety for early shipment.

ALSO PRIVET IN QUANTITY.

**Ideal Fruit and Nursery Co.**  
HOOD RIVER, OREGON

## WOOD LABELS

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

**Dayton Fruit Tree Label Co.**  
South Canal St., Dayton, Ohio

## Ornamental Trees, Shrubs, Evergreens, Vines, Etc.

HIGH  
GRADE



LARGE  
VARIETY

Correspondence solicited. Price list upon request.

**W. B. WHITTIER & CO.**  
South Framingham, Mass.

WE OFFER FOR FALL, 1912,

## Peach Trees in car lots

NORWAY MAPLE  
SILVER MAPLE

CALIFORNIA PRIVET,  
1 year

325,000 APPLE, 1 year, grafts and buds,  
in COMMERCIAL VARIETIES

**The Greenbrier Nursery Co., Inc.**  
Greenbrier, Tenn.

## SCARFF'S PLANTS

equal to any  
on the market

Small Fruit Plants our specialty for 25 years. 100,000 Transplanted Raspberry, Blackberry and Dewberry plants, fine for critical retail trade.

Currant, Gooseberries, Grapes, Horseradish, Asparagus, Rhubarb, etc. Hardwood cuttings and layers in large quantities. See our wholesale list before placing your order.

**W. N. SCARFF**

NEW CARLISLE, OHIO

## FOREST TREES

SEEDLINGS AND TRANSPLANTS

in quantities for retimbering or lining out; healthy stocks, from the very extensive and well kept Wholesale Nurseries of

**H. H. PEIN, Halstenbek, Germany**

for latest trade list and all other inquiries address our sole American agents:

**August Rölker & Sons**  
P. O. Box 752, or  
31 Barclay Street  
New York



400,000 Small Fruit Plants in storage for early spring trade, 1913. Blackberry root-cutting and sucker plants; Red, Purple and Black Raspberry; Downing Gooseberry, one year, No. 1; Dewberry; Asparagus two and three year roots; Rhubarb one, two and three year whole roots and divided. Trade List ready Feb. 1st. Let me quote you on your list of wants.

**P. D. BERRY, Dayton, Ohio**



WE ARE GROWING FOR THE SEASON  
1912-13

1,000,000 American Sycamore,  
6 in. to 3 ft.

1,000,000 Green Ash,  
6 in. to 3 ft.

500,000 California Privet,  
6 in. to 3 ft.

Also a large stock Alianthus, Box Elder, Catalpa Speciosa, Black Locust, Red Bud, American White and Cork Elm, Tulip, Poplar, Sweet Gum, Carolina, Lombardy and Silver Poplars, R. Mulberry, Althea (both seedlings named varieties), Berberry, Calicanthus, Deutzia, Hamamelis Virginica, Spireas in varieties, Weigelias, Yucca, Maples, Chinese Wistarias and a large variety of other stock. Send for Trade List.

Also Tree and Shrub Seeds.

**Forest Nursery and Seed Co.**  
McMinnville, Tenn.

## Seedling and Transplanted Evergreens by the million

Arbor Vitae	Jack Pine
Austrian Pine	Norway Spruce
Black Hill Spruce	Pinus Ponderosa
Colo. Blue Spruce	Scotch Pine
Concolor	White Pine
Engelmanii Spruce	White Spruce

We have these in all sizes and ages. Also a general line of nursery stock.  
Evergreen price list now ready.

**SHERMAN  
NURSERY COMPANY**  
CHARLES CITY, IOWA

## Cyclopedia of American Horticulture

L. H. BAILEY  
IN FOUR VOLUMES

The NATIONAL NURSERYMAN has made special arrangements with the publishers of this great work and now offers it to Nurserymen on *special easy monthly terms*, \$2.00 per month for ten months. The work shipped by express prepaid on receipt of first installment and coupon below filled out

Practical instructions on every subject connected with Horticulture. Four handsome quarto volumes; 2,800 original engravings, 50 full plates; 2,016 pages and 4,357 articles; Total plants accounted for 24,434.

Fill out this coupon and mail with first payment:

SPECIAL ORDER BLANK.

Date .....

National Nurseryman,  
Rochester, N. Y.

Please enter my name as a subscriber for the new CYCLOPEDIA OF AMERICAN HORTICULTURE to be sent to me, charges prepaid, complete in four illustrated volumes, bound in green cloth. I inclose \$2 and agree to pay \$2 monthly for nine months after delivery until \$20 is paid.

Signature .....

Address .....

Town ..... State .....

Reference .....

NOTE:—Send Money by Check or Post Office Money Order.

**THE NATIONAL NURSERYMAN**

218 Livingston Building

Rochester, N. Y.

## Franklin Davis Nursery Co.

BALTIMORE, MD.

### WE OFFER FOR SPRING 1913

APPLE—I and 2 year.

PEACH—Will have a nice lot of smooth trees in good assortment of varieties.

CHERRY—I and 2 year.

PEAR—I and 2 year.

ASPARAGUS—I and 2 year.

CALIFORNIA PRIVET—I, 2 and 3 year, or carload lots—fine, bushy plants.

ORIENTAL PLANES, CAROLINA POPLARS, NORWAY MAPLES, SILVER MAPLES.

AMERICAN ELMS and a general assortment of ornamental stock.

SEND IN A LIST OF YOUR WANTS

### WANTS.

We want small Evergreens and Shrubs for transplanting—What can you offer?

# DO YOU WANT THE BEST

## APPLE SEEDLINGS

Your money can buy? We can furnish them. We have been growing Apple Seedlings for twenty-eight years and think we know what it takes to make good Apple Seedlings. We find that one important part of the business is often overlooked. That is, to keep the foliage in a healthy condition. Seedlings with foliage damaged either by insects or fungus diseases cannot have a strong and vigorous root. Their vitality is weakened and they make poor budding or grafting stock. Our seedlings have been sprayed throughout the entire growing season and the foliage is in perfect condition, insuring perfect root development. Grading and sorting will be done by experienced workmen, under our personal supervision. Ask for sample of seedling. We shall be glad to send it by mail or prepaid express. Apple Seedlings are very reasonable in price this season. Why not grow a block of budded apple? A few scions placed in cold storage will give you cheap buds for next summer's work.

### WE OFFER APPLE SEEDLINGS IN THE FOLLOWING GRADES:

$\frac{1}{4}$  inch and all up straight       $\frac{3}{16}$  inch and all up, straight       $\frac{3}{16}$  to  $\frac{1}{4}$  inch, straight  
No. 2, straight, strong grade      No. 3

APPLE—two years					APPLE—Continued					PEACH—Continued				
	$1\frac{1}{8}$ " & up	$\frac{5}{8}$ — $1\frac{1}{8}$ "	$\frac{1}{2}$ — $\frac{5}{8}$ "	3—4'										
Astrachan		40	60	75	Wolf River	285				O. M. Free	364	370	613	350
Arkansas Black	420				W. S. Paradise	110	66	35	25	Opulent	150	124	166	105
Aut. Strawberry			30	45	W. W. Pearmain	160	165	150	69	Salway	408	570	520	540
Ben Davis	1700	1930	1950	2030	Yellow Bell			35	21	Smock	150	250	270	116
Chen. Strawberry			50	43	Y. N. Pippin	890	417	80	50	Stump	330	440	656	610
C. E. White	54			20	Yellow Transparent	70	630	870	930	Triumph	185	90	70	14
Early Harvest	1200			205	York Imperial	1640	1700	3000	300	Yellow Cling	225	383	475	280
Gano	2600	1250	850	390	Florence	240	100	180	90					
G. G. Pippin	2300	3100	2900	2260	General Grant	62	40	60	25					
Hubbardston	60	86		95	Martha	100								
Huntsman	93	44	90	68	Transcendent	500								
Ingram	120	180	400	243	Whitney	140		140	375					
Janet	240	230	2370	200										
Jonathan	1500	1185	3000	1700										
M. Blush			110	150										
M. B. Twig	305		40	100										
Minkler	50													
Missouri Pippin	360	155	88	140										
Northern Spy	580	240	320	220										
Pries Sweet	380	185	168	93										
Rambo	550			16										
Ramsdell Sweet	213	158	80	25										
Red June	183			240										
Rome Beauty			900	100										
Stayman's Wine Sap	750	365	380	294										
Summer Rambo	45	40	50	32										
Sweet Bough	75													
Talman's Sweet	1196		300											
Wealthy			400	350										
Wine Sap	3280	2085	1700	1430										

### JAPAN PEAR SEEDLINGS

### CATALPA SPECIOSA

We gather our own Catalpa seed and know them to be genuine Speciosa. Plants are grown on upland and are all well ripened and stocky. FRENCH PEAR SEEDLING, HOME GROWN.

### GRAFTS

We are prepared to make Apple and Pear Grafts, whole or Piece Root.

APPLE TREES,      GOOSEBERRIES      CURRANTS  
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KIEFFER PEAR, 1 year      FOREST TREE SEEDLINGS

# J. H. SKINNER & CO.

NORTH TOPEKA, KANSAS

# The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

Vol. XXI.

ROCHESTER, N. Y., JANUARY, 1913

No. 1

## SELLING PRICE

By George W. Ottinger

One of the most important factors in business is selling price. It represents to consumer the class of merchandise we handle, whether cheap, moderate or high priced, and to the owner it represents that in which is included his profits.

Selling price is made up as follows: Cost of product, plus cost of selling, plus cost of handling, plus overhead charges, plus profit. Each of these items of cost is necessary to figure a proper selling price. An especial advantage in any one item or all items of cost over our competitors gives an additional profit or an opportunity for a reduced selling price.

Cost of product is essential inasmuch as it is a basic factor and one in which there is considerable fluctuation, especially in producing different varieties in different locations and by different methods. The more thoroughly the cost is determined there will be a tendency to produce better merchandise and in a more scientific and needless to say economical way.

The selling cost, that is advertising, soliciting or other method of offering your goods for sale, is quite frequently a drag on a business because a careful examination is not made to find what it costs to sell a dollar's worth of merchandise, or in other words, whether the particular kind of advertising and its distribution, or the particular kind of soliciting and the sections solicited are the best considering the class of product we are endeavoring to market.

Cost of handling, that is digging, packing, hauling, delivering, etc., is an item that needs close watch as herein can much be spent or much be saved inasmuch as we have efficient facilities for quick work.

Overhead charges, here is another item frequently overlooked in the making of a selling price. This includes office expense, exclusive of selling expense, rent, heat, light, interest, discount and the thousand and one unclassified expenses, small in the individual items, but large in the aggregate; and frequently these are the menace of the profits.

Profit, what should it represent, the owner's salary after all expenses are deducted? No; the business should pay the owner a commensurate salary, which is chargeable against production, selling, handling and overhead.

Profit in its true sense represents yield on investment and is what the business pays the owner for the use of his capital therein invested.

It is an uncontrovertible fact that the safest selling price is based upon the most accurate information on all these sub-divisions of your business expense; in this and no other way can a profit be assured, for in using your competitor's catalogue to fix your selling price, you are using his cost to figure your profits.

#### COST OF GROWING NURSERY STOCK

The following letter is self explanatory. It was sent out by the NATIONAL NURSERYMAN with a view of opening up the subject of cost as applied to the growing of nursery stock.

The editor wishes to express his appreciation of the numerous candid replies which are given below. They show the nurserymen are fully alive to the importance of the subject. Even if no practical method of determining cost is discovered, a general understanding of how prices are made will at least have a tendency to halt price cutting. If cost is known it is possible to undersell the other man and still make a profit but when it is not known as in the case of nursery stock price cutting is suicidal.

*Flourtown, Pa., Dec. 9, 1912.*

Gentlemen:

*The NATIONAL NURSERYMAN would appreciate it if you would answer the following questions for publication:*

*The same letter has been sent to one hundred representative nurserymen, so that the answers should give much light on the subject and be of much benefit to the nursery business:*

- (1) *Have you any method of determining cost of production?*
- (2) *If so, will you kindly give an outline of your method?*
- (3) *Is the cost of production as near as it can be arrived at, a factor in your selling price?*
- (4) *Does the other man's catalogue price influence you, rather than what you think the price should be?*
- (5) *Can you name any items that in your opinion are being sold below cost?*

*If desired your name will be withheld, merely publishing the answers.*

*Trusting you will favor us, I remain,*

*Yours very truly*

EDITOR.

No. 1

"(1) We have no particular method in determining the cost of production; we found it a very difficult matter to ascertain the cost of each tree, shrub or evergreen, etc.

"(3) Nursery stock of easy propagation generally sells at lower price, than such as require more skill, more expense and more time. Extra expense does not always increase the selling price, for instance, eight and ten years ago the extra expense of spraying and extra loss of destroying scaly trees, did not increase the price of apple trees, although they were selling then at about cost of production or below. Supply and demand make the price.

"(4) One man's catalogue does not influence us what the price should be, but the catalogue of several nurserymen do influence us.

"(5) At the present time we do not remember anything which is selling below cost."

No. 2

"In response to your request of the 9th, we are sorry that we cannot give you information in this regard, as we have not attempted to get at the cost of production."

No. 3

"Nos. 1, 2 and 3, that we have no method of determining cost of production, and therefore the cost is not much of a factor in determining our selling price.

"We have thought about this cost matter a great many times, and have tried to figure out some method by which cost could be ascertained, and as a matter of fact did start in on the proposition about four years ago and continued it for a few months, but found that if we were going to get any accurate figures that it would mean the employment of a time keeper who would have to be a fairly good accountant, and a man we could not secure except at a fair salary. It was also evident that an experiment of that kind must be conducted over a considerable term of years to get at fair averages, because results vary so greatly on account of climatic conditions, drought, floods, frost and heat, and the variations in the soil.

"If it could be established that one farm could turn off Apple trees at a certain cost, it would not be a sure thing that another farm could hold at the same figure, and we also felt that even if the methods were continued over a series of years and figures arrived at that we would still be up against this proposition that when our trees came into the market and were fit to dig, that they must be dug and disposed of and must be sold at the market, regardless of cost, or else put on the brush pile, so that we could not figure how we were going to be much better off if we knew the actual production costs, except that it might lead us to abandon the growing of certain things and let somebody else grow them, and buy of him.

"When we see one block of trees count up 70% of the budding in No. 1 trees, and other blocks count 25% to 30% on No. 1, it looks to us like a pretty difficult proposition to get at average costs. This we think will also answer question 5.

"Answering question 4, in making up prices we think we are all influenced more or less by the other fellow's catalog prices, although, of course, we try to get as near as we can to the price at which we think the goods should be sold."

No. 4

"We are obliged to state that we have not adapted any method of determining cost or production. We have based



our selling prices to a great extent on information which we gather at the Nurserymen's Convention each season, and might say, therefore, in answer to your question No. 4 that we are influenced by the prices of other concerns. We could not name any items which we are selling below cost. It certainly seems to us that a complete cost accounting system should be used. It is more or less conjecture or estimate as to what stock really does cost to produce. We have taken this matter up with some of our foremen at different times and they hesitate to tackle the job. It certainly would appear that it would be a complex affair."

## No. 5

"We do not maintain a cost department, and as we do not do this, of course, we cannot base our price on cost of production, and have to go somewhat by the other fellow's list. We think perhaps field-grown Roses are sold below cost, at least, pretty nearly at cost of production."

## No. 6

"This is a question which has had the attention of many members of the American Association for the past ten years. Papers have been presented before the annual meetings on this question, but as yet no practical plan has been suggested by which the cost of different blocks could be determined.

"We, of course, keep a 'Nursery Account' charging to the nursery all expenditures made in the planting, cultivation, care, digging and handling the stock and at the same time crediting the Nursery Account with everything received from the plant at prevailing wholesale prices. By this method we are enabled to determine what our stock as a whole costs us, but as for being able to ascertain the cost of any individual block, would state that we have been unable to devise any plan that is at all satisfactory.

"Men and teams frequently work part of the day in one block of trees, the remainder of the day in another and so on throughout the entire season. It would require the entire attention of a vigilant time-keeper to keep track of these movements in a large plant, but it would not possibly be a very severe task in keeping track of it on our place.

"The cost of production does not affect the selling price at which our stock is placed on the market in either wholesale or retail trade. The demand, supply and prevailing price of leading nurserymen is usually taken into consideration in this respect. The facts are, if we were to undertake to sell some classes of stock at a reasonable profit above cost of production, it would likely have to be consigned to the brush pile at the end of the season.

"The catalogue price of other nurserymen and personal quotations from them, enter very largely into the price asked by us for stock which we offer to the trade or to the planter.

"Replying to your inquiry No. 5, would state that quotations in nursery stock like that of any other commodity, are governed largely by the supply and demand. There are times of course, when stock is sold below the cost of production. We are not in position to give any reliable data on this point however, at the present time.

"We regret exceedingly our inability to give you any information of value on the questions propounded, but shall

take pleasure at any time in giving you such information as we can along our line."

## No. 7

"We have at hand your letter of the 9th inst., and in reply would say that your questions, to which you have asked our answers, interest us greatly: *First*, as we have recently installed a system whereby we hope better to determine the cost of production than heretofore; *second*, we have divided our Nursery into sections of which separate accounts are kept to which all young stock, fertilizer, labor, etc., are charged; *third*, we find we can arrive at the cost of production closer by this method, thus making costs figure in our selling prices nearer than heretofore; *fourth*, no doubt the other man's catalogue has been an important factor in making prices. In our own case we do not base our prices on those quoted in other catalogues, but rather, as near as possible, from the costs of our business; *fifth* concerning the selling of items below cost, we do not know of any at this time. Our stock is all sold at a price that covers as near as can be determined all costs.

"We are pleased at this time that your publication should interest itself in this important subject and you may be sure that we will follow the different answers closely to see if we can pick up some new ideas.

"Our system has not had perhaps due time to try itself out but to date are very much pleased at the results obtained and we feel sure that with perhaps a few changes it will be of a great benefit to us.

"Thanking you for calling upon us and trusting that indeed you may receive replies that will be of general benefit not to ourselves alone but to the Nursery business as a whole."

## No. 8

"I have no method of determining cost of production. The other man's catalogue price does not influence me. I have always thought there were some things choice, slow growing for instance, that were sold below cost, but can give you nothing definite. However, there is no question but that the cost of production has increased materially, also the cost of selling. In fact, about every thing in the way of material used in the business has increased in price."

## No. 9

"We are glad that THE NATIONAL NURSERYMAN is taking up the subject of 'Cost Accounting' for Nurserymen. Our experience has been that Nurserymen know very little about the detail of their costs. We are not much farther advanced in this respect than others.

"To date our efforts have been confined to some experiments and much thinking, without any adequate solution of the problem. We have looked into several Cost Systems of other businesses and find that all of them are lacking in certain particulars that our business requires.

"The cost of production is a determining factor in fixing our selling prices, but inasmuch as we only partially know our cost as much dependence is not based upon it in fixing our selling price as there should be.

"The other man's catalog does not influence us very much

in fixing our own prices. We believe our prices are generally higher than those of many of our competitors, so their catalogs are of little use to us. We confess, however, to consulting them occasionally about some of 'The Best Sellers.'

"We can not name any articles that are being sold below cost by all nurserymen. We do know particular instances at several nurseries where, if their experience has been the same as ours, they are selling below cost, but we are not prepared to say that any item is being sold below cost by all of us.

"In this matter of Cost Accounting we think it probably will be easier for the growers of Fruit trees to determine their cost than the grower of Ornamentals; as Fruit trees are usually dug after two seasons' growth, while Ornamentals extend over a period of many years.

"We will look forward with interest to the article in the NATIONAL NURSERYMAN that you prepare about this."

#### No. 10

"No. 1. Would say in growing a large number of varieties of ornamentals, no fruits, it is not possible or feasible to calculate cost on separate items. This being the case, as to No. 2, the only way that could be determined satisfactorily is by whether receipts are greater than expenditures at the end of the year. As to No. 3 the wholesale price is not determined in the slightest degree by cost of production. It is purely a matter of competition, price going up or down according to the supply and demand. (4) When we come into competition with 'the other man' we have to make our price on that basis unless we are growing better stock and it clearly shows itself superior. We try to eliminate 'the other man's' price in this way. (5) To the best of our knowledge and belief much nursery stock is sold below cost when there is an over supply or the individual seller is not informed as to the conditions of the market, and he himself is overstocked. For instance, Frau Carl Druschki being offered in the open market for less than the foreign duty, that is \$.04. Such instances can be readily found in the auction rooms in New York City. Much of this stock is rubbish from the first class nurseryman's view point. Both the domestic and foreign nurserymen are to be blamed for this foolish policy."

#### No. 11.

"1. I have no present method of determining cost of production. I have been considering the matter a long time, and in certain investigations I have made it seems to me clear that the nurseryman does not figure in overhead charges.

"3. Yes. I largely figure on what I can estimate the cost of production is and make my price accordingly. This is generally higher than the same class of stock is quoted elsewhere, but I figure on supplying a better grade than is usually offered.

"4. Very little, although of course to some extent, particularly where there is an overstock of any item, but am not usually overstocked in anything.

"5. I think that 50% of all nursery stock is sold under cost, largely on account of not figuring in overhead charges as above outlined.

Besides this, nurserymen so far as I know do not figure in

interest on much of their investment, depreciation and other charges, which the ordinary well conducted business is careful to charge up against cost."

#### No. 12

"(1) We have no method of determining cost of production.

"(3) The cost of production is not a factor in our selling price.

"(4) The other man's price influences our prices.

"At the present time we think all fruit trees are selling at a profit. It seems to us as if the supply and demand necessarily makes a price on commodities. Still when stock of the different varieties is cleaned up annually it would seem as if it should bring a higher price in the market."

#### No. 13

"No. 1: Yes, in a general way.

"No. 2: We take into account the cost of the plants themselves; the cost of lining them out; the number of years it takes a given plant to become of salable size. Of course the cost of maintenance of plants and the capital invested, also the use of the land has all to be taken into account.

"No. 3: Yes.

"No. 4: In a general way. Of course, we can not be wide of the mark, lest our prices appear out of proportion to the general valuation when compared with those of other concerns.

"No. 5: No; unless in the case of some items in which there is an overstock, when it is a question of selling it at half price or at a reduced price. As a general rule, we prefer to burn it up, unless it is to be sold to some other nurseryman, rather than sell to the consuming public at a price which is one-half of its value."

#### No. 14

"We have no way of determining the cost of production and would be very glad indeed if we could find someone who could tell us how. The cost of production does not enter into the selling price. We are obliged to sell for what we can get or at the market price. Of course other people's catalogues do influence us more or less but we aim to fix our prices at what we think the stock is worth.

"There are many things sold below what they cost to grow by different people, not any particular one, but in some cases they are people who are not regularly in the nursery business and in other cases, it is where a man is overstocked and rather than burn it up, the stock is sold at less than it cost him to grow it."

#### No. 15

"Question 1: No.

"Question 2: No.

"Question 3: No.

"Question 4: No.

"Question 5: No.

"In addition, we think it almost impossible to tell the cost of any certain item of nursery stock, especially where a general line is grown. It would require a great deal of book-

keeping and at considerable expense but, of course, it could be done. A nurseryman growing only a block of Apple, Peach or Pear could very easily keep account of expenses against each block and when sold, credit amount received and in this way get close to the cost of growing each tree but even with this, the cost would vary from year to year.

"We figure outside nursery stock by bulk, in whole rows or more, as to time taken to produce, and time spent on cultivation, and fertilizer.

"For greenhouse stock, we arrive at a pretty fair conclusion by the 100 or so in the various size pots, and time taken to get into salable condition. We are governed also somewhat by others' quotations and in some cases sell certain lots at very near cost rather than hold them over, but this is a very rare procedure.

"We are not selling any stock below cost."

#### No. 16

"1. As far as I know a cost system has never been worked out for growing nursery stock. The best thing I know of is the paper by the late Geo. Sweet, published six or seven years ago in the annual report of the nurserymen's meeting. Also I am working out a system and in five years expect to have something that is fairly accurate. It will take a ten years' average to be anywhere near accurate in showing the cost of growing nursery stock. Your best guide on this subject will be to take the contract prices of various contract growers. With this, and the average stand and the average per cent of the different sizes, you can figure out a cost estimate yourself. It will be about as accurate as anything I know of.

"2. My system is not far enough along to write about as yet.

"3. Our prices are based on what we believe to be a fair wholesale price for the stock. You can get this average from the large wholesale nurserymen. The markets fluctuate so that the cost of growing is often entirely lost sight of.

"4. The other man's catalog prices can never be used as a guide for your business, at least, that is the way it strikes me.

"5. Nearly every nurseryman is selling some item too low. Often this is not necessary. The price question is the greatest problem before the nurserymen today. It will never be solved until a number of other things are generally known, including the cost of production. Take a number of the different representative wholesalers lists and you will see a very marked difference in prices, often a hundred per cent or more on some items. If the wholesale market is in such condition what can you expect of retail prices?"

#### No. 17

Replying to your letter of December 3d, as to method of determining cost of production of nursery stock, etc., would say.

1. We have no rule of determining the cost of production. In our line where we grow so many small lots of some things, and such a great list of varieties, it is impossible to do so. We do, however, take special things now and then and keep cost of the work so as to get a general idea of the cost. For instance, supposing we plant out a block of 20,000 Hydrangea P. G. In this particular item, we will keep record of the cost

of ploughing the ground, cost of setting the plants and the cost of the young plants. This then gives us the cost of the stock up to that point, but after that, we are lost. Again, we might take the cost of digging and grading a whole block of plants, but these figures are merely for the purpose of getting an idea of certain portion of the cost of production.

Again, we might transplant 1000 or 2000 Norway Maples, 1 inch to 1¼ inch caliper. We use the same method of arriving at the cost of that work.

We believe that it is impossible to really arrive at an accurate cost of growing and selling a plant. Conditions make the cost variable. We may set out a block of 10,000 Hydrangea P. G. this Spring, and get a ninety-five per cent. stand. Next year, we might set out another block of the same quantity and get a poor growing season and a long period of dry weather and we may not get over seventy-five per cent. stand. Again, when we come to dig our plants, it may be that we have had two excellent growing seasons, and at the end of two years, our plants are larger and will bring more money than another period when we have had poor growing weather and it will take three years to make plants of the same size. There are so many conditions which enter into the nursery business, favorable and unfavorable, that we consider it impossible to reach a conclusion that is anywhere near accurate.

2. No, the cost of production is not a particular factor in the fixing of the selling price. We have to be governed by the market price to a very great extent; nevertheless, if we feel that the price is too low, we advance it to a figure more nearly what we think it ought to be. We do not want to sell stock at less than cost, if we can help it. This also answers your question No. 3.

4. In our opinion, all nursery stock is being sold too low. It may not be at or below cost, but we certainly think that nurserymen are not getting the percentage of profit they are entitled to considering the risk which they assume in growing their stock and the expenses in handling it. The same amount of money invested in almost any other business would produce a greater percentage of profit. We would like to give a dinner to all of the men who have gotten rich actually from their nursery business. Of course, there are some nurserymen who have acquired wealth but it has mostly been from the increased sales of real estate or something of that sort. Would have to set but very few plates at a dinner for those who have gotten rich actually from their sale of nursery stock. Don't all speak at once!

[NOTE—The name of the author of the above will be furnished to those applying for the dinner upon application.—EDITOR.]

#### No. 18

Replying to your favor of the 9th would say, that we have no particular method of determining the exact cost of production of our stock, only in a general way. Of course, the cost of growing trees, etc., varies every year. We know the expense of running our business, what the stock which we plant cost us, and in a general way figure that we can grow certain trees of a certain grade one year with another at a certain price, but even the fact that we are satisfied we are selling sometimes goods less than they cost us is not much of a

factor, for if there is a large stock on the market and other people are selling, it is simply a question of selling at about the same price or burning it up. Of course, we are influenced by their price lists, although we endeavor to make prices in our own list from what stock we have to sell of our own.

Do not know as we could name any special items that are being sold below cost at present. Of course, so far as that is concerned some items of a certain size can be grown in some places and by some men at a good deal less cost than when grown by other men.

#### No. 19

Your letter of Dec. 9th is received and contents noted. We have never tried to determine accurately the cost of production on our stock where we grow it from three to ten, and in some cases twelve or fifteen years, before we dispose of it. The variation between blocks of stock of similar varieties is so great when transplanted on different years, that we have never found it practicable to let one block go as a sample for all. On Evergreens, especially, which we handle a good deal, we might one year have a five per cent. loss from transplanting, and another year a twenty-five per cent. loss.

Of course, fundamentally, the cost of production is a factor in the selling price, as the difference in the cost of growing a *Deutzia* three to four feet and growing a *Rhododendron* three to four feet is quite large, but when we get a specimen plant we charge at retail what we consider it to be worth. Of course on some things one can make one hundred, two hundred or three hundred per cent. profit which seems somewhat exorbitant, but if one cut that down to a twenty per cent. profit he would be one or two hundred per cent behind on some things.

In regard to the "other man's catalog price," in the wholesale trade the market fluctuations are a determining factor in the price, but in the retail trade a plant or tree should command a price in keeping with its quality. We do not want to charge more than a thing is worth even though it be to a customer who is wholly ignorant of the relative value, but we find in actual practice we are seldom troubled that way.

Where the retail price continues practically the same year after year except for the general upward tendency, we do not think of any items that are being sold below cost of production. As we do very little wholesaling, except with the stock which we have in surplus, and always try to buy as cheap as we can, our point of view is somewhat different from the wholesaler's, and we do not know the cost of production on different items through various parts of the country sufficiently well to name any being sold below cost.

#### No. 20

The question of cost of growing is one that is very interesting to us. We have given some considerable attention the last several years, and while we are now pretty nearly able to determine our cost of production, still it is not anywhere near exact. We think we are making progress right along and getting nearer each season.

Replying to your question number three, will state that the cost of production is the important factor of our selling

price, as our selling price is based absolutely on our cost price. We are of the opinion that there are lots of items in the nursery line that are being grown below cost, and on the other hand, lots of stock is sold for two or three times what it is really worth. We think this harms the trade in general, and we believe the nursery trade in general will be much better off when they are able to figure more closely their cost of production.

#### No. 21

Answering your questions: Nos. 1 and 2. My method of determining cost of production is based upon the average number of plants that can be put upon an acre of ground and the average yield together with the average cost per acre for labor and overhead expenses, the average being determined from tests running a number of years.

No. 3. The cost of production is to a certain extent a factor in determining my selling price.

No. 4. It is not the other man's catalogue price that influences me so much as it is my knowledge as to his lowest price whenever competitive bids are being considered.

No. 5. This question is too sweeping to permit an answer except at length. Questions of soil, climate and method of cultivation, together with cost of land, permit some of my competitors to grow stock and sell at a profit below my cost of production.

#### No. 22

No. 1. We have no method of ascertaining exact cost of production, as no two blocks of trees are the same.

No. 3. Cost is only one factor determining the selling price. Supply and demand has more to do with price we ask.

No. 4. Other catalogs and price lists, or trade lists, have considerable influence in setting the price and should be considered very carefully before sending out.

No. 5. Think cherry has been sold too low considering the supply of stock in the country, as there is little profit at prices that have been quoted by some.

### THE SELLING PROBLEM

The able editorial on getting orders and business building in December issue of *THE NATIONAL NURSERYMAN* gives much food for thought and affords a big opportunity for discussion and exchange of ideas.

The nursery business has in its ranks many able men of high ideals and very few who can boast of great wealth made in their chosen vocation. This would seem to prove that the present day nursery business is not as remunerative as it is interesting and instructive.

Therefore, we all will welcome anything set forth in these columns that will help one market his wares at a saving over methods now in vogue.

Unlike many articles of commerce, nursery stock is more of a luxury than a necessity. Excepting, those who grow fruits for a living and must have stock every so often. The bulk of our customers are people who actually do not need stock and if left to their own initiative would order but little, if any. Altho forced the sale of nursery stock seems to be on the increase. That this growth is created rather than a



natural demand no one can deny. What the high water mark is or when it will be reached no one can say. We have three avenues for reaching the ultimate consumer; the small local dealer and grower, who has a call trade; the mail order man and the agency firm. Eliminating the first as a non important factor, the mail order men probably do twenty-five per cent of the remaining business and the agency firms seventy-five per cent.

Just how the cost of getting business by these two methods compare, would be hard to determine. With the present day tendency for elaborate and expensive catalogues and the appalling loss, via the waste-basket route, together with the cost of mailing, assembling prospects, newspaper and rural advertising, the cost of getting business for the mail order man is very considerable and his decided raise in prices the past year or two shows he has been traveling on a small margin. While the mail order business is a legitimate and good business, one is not prepared to believe it to be the ultimate solution of the sale and distribution of nursery stock. The short season they have for selling, the extreme difficulty in holding a permanent trade in line and the sharp influence, periods of depression have upon the sale of goods by catalogue all militate against the mail order nurseryman becoming a predominating factor in the business.

When it can be accomplished for reasonable cost, direct solicitation is the most satisfactory means of getting orders for nursery stock or any other kind of business. The nurseryman employing agents has the advantage of soliciting business about eleven months of the year. He can choose his territory and his men and can cover the ground more thoroughly and with better results than would be possible by any other means. The reliable nurseryman with a good agency force has something tangible to start with each year. If he is giving his customers good stock and treats his men right, (which most of them do) his business is bound to grow.

The cost of getting agents when times are good is considerably more than when help is plentiful, but of course, in good times good men will sell more than when times are dull. Judging one season with another, the average cost of getting agents and equipping them with good outfits should not exceed \$5.00 per man and figuring that those who make good usually stay with the firm several seasons, the business they get in subsequent years reduces the first cost and contributes to the maintenance of the office. The cost of getting new business will vary a great deal in different localities and depends much upon the efficiency of the men in charge and upon the burden imposed in the way of salaries and general expenses. The commission one pays to salesmen is an important factor, but fortunately among nurserymen there is more uniformity on this than there is on prices they sell for. The average nursery agent gets from twenty-five to thirty per cent. for his work. There is no other line of business of the magnitude and importance of the nursery business that pays less.

What the nursery business needs is more unity of purpose and standardization. At present, there is all together too much discrepancy in prices, in fact, too much of many reprehensible practices wholly demoralizing to the business. We all know what the trouble is and most of us know who the

troublemakers are, but to purge the business of these undesirables is quite another matter. In brief, we have with us the mail order man selling cull stock, advertising it as being the best; the wholesaler who after shipping to the retailer sends out low priced circulars broadcast throughout the land; the agency firms who act as pirates preying upon the good will of others with unreasonable commission offers; last but not least, the shark with his gang of five or six nearcrooks who is ever seeking new fields and who leaves behind him a naked trail of bitterness and wrath against nurseries in general. If the better element of the nursery business would unite and put up a solid front against such pernicious activities a great deal could be accomplished and while not advocating anything as revolutionary as a trust scheme a decided stand should be taken on the question of prices which after all is the most vital issue. Therefore, let us endeavor to enlighten our blind brethren, (who are as those lost in the forest), trying to do a profitable business at prices wholly prohibitive of such results.

Wauwatosa, Wis.

A. S. HANSON,

Western Sales Manager, Hawks Nursery Co.

#### AMERICAN FORESTRY CO.

The Committee on Gardens of the Massachusetts Horticultural Society has just awarded a "special prize" and medal to the American Forestry Company of Boston for the excellence of their work in producing the famous little trees of their "Little Tree Farms." There seems a singular fitness of things in the fact that this unexpected honor came to Mr. Borst from a "Committee on Gardens" for the intensive cultivation of the acres and acres of rectangular beds at Little Tree Farms has always led to the comparison from visitors and passers-by, "How like an enormous garden!" The Committee on Gardens, however, saw more clearly than this: not *like* a great garden, but *actually* a great garden, of little trees, they pronounced it to be. And it was in recognition of the scientific accuracy, delicate skill, and technical knowledge of the principles of agriculture, forestry, and gardening, that they have bestowed their special prize. The operations of seeding, transplanting, scientific weeding and prevention of weeds, spraying, pruning, identification of seeds, extracting, cleaning and care of seeds, with all the other operations in practice at the farms, are not only done on a very large scale, but they are done with extreme accuracy, and with the latest developments in method and implement; and in both these latter items Mr. Borst has been the originator of much of the best that he uses. The bestowal of the medal is merited praise for much pioneer labor, but its true significance, as a recognition of a new and valuable type of gardening, makes it of far greater importance to the nursery and forestry world than its merely personal aspect indicates. It is a welcome given to a valuable "Beginning in American Forestry," as well as a compliment to Mr. Borst and his able growers

#### SOUTHWESTERN HORTICULTURIST

A new monthly Horticultural paper has been born at Fort Worth, Texas, named as above. Our country is so big and the products so various that we welcome it and wish it a long and prosperous life.

ORNAMENTALS

Paper read by M. F. Chandler, before the Western Association of Nurserymen at Kansas City, December 11, 1912.

Landscape Engineering or Landscape Gardening, depends upon several necessary things; a sense of the artistic, the familiarity of plants, trees and shrubs and their habits of growth. The constructive work of grading, draining and the laying out of drives and walks. Landscape gardening is making pictures with trees and plants.

The proper way to look at the home grounds is that they form a picture, relative with the house as the dominating feature with the trees, shrubbery and flowers as vital parts. The next principle is to plant in groups or borders, not as individuals. Nature rarely scatters her plants, instead of this she plants in great masses.

Do not fill in every available space with trees and shrubs; try to create a picture using the rich green grass for a canvas, framing the whole in by a well-massed irregular border.

In massing the border use a variety of trees and shrubs that blend well together as to time of blooming, color of foliage, height, etc. The demand for ornamentals is greater than ever before. Now is the time for nurserymen to begin to grow ornamental trees and shrubs. The demand for elm and hard maple, three to six inches or larger, is very great.

The majority of people want shade at once and are willing to pay a good price for it.

Every nursery should carry a good line of ornamentals, planting heavier of some varieties than of others. Spirea Van Houttei is always in demand, Spirea Thunbergii we cannot do without, Berberis Thunbergii we use by the thousand.

Lilac in all varieties is good. Snowball, Viburnum, opulis sterlis, and Plicatum, Philadelphus, coronarius and Grandiflora, also the dwarf Philadelphus Aurea is very good.

Deutzias in variety, Crenata, Pride of Rochester, gracillis, Lemoine, Berberis purpurea and Vulgaris, the Dogwood especially the red stem variety, are very good. In heavy border planting Aralia, Stag Horn Shumach, Rhus Cotinus, Prunus Pissardii, Golden Elder, are good, building down in front with lower growing shrubs.

We use a great many trees in heavy borders, Elm, Sycamore, Volga Poplar, Bolleana Poplar, Tulip, Sweet Gum, Maple and even fruit trees are fine to group in the border.

The small grounds can be made beautiful as well as the large estates, always keep the center open, planting in border and around buildings. Peonies of the best varieties

should be used in large quantities. Phlox, Iris, Bleeding Heart, Oriental Poppies, Gypsophila, Chrysanthemum, Golden Glow, Hollyhocks, Gaillardias, Oreopsis, all find a place in the border.

The Volga Poplar is one of the best we have, using it six, eight and ten feet apart to good advantage to make a heavy screen.

Magnolias in variety are perfectly hardy and are fine to group on the lawn or in the border. Bechtel's Double Flowering Crab is good.

Ornamental Grasses may be used to advantage on the lawn in the border or near water ways.

Hydrangeas grouped in masses are very showy especially in triangles of drive ways.

On large estates evergreens may be grouped in masses or in borders, or used as specimens.

In all I have tried giving a general idea of what may be done with ornamental trees and shrubs. There are hundreds of others that may be used to advantage.

Reviews, Note and Comment

Mr. Otto Heinecken, representative of Messrs. J. Heins' Sons, Halstenbek (Germany), is at present at headquarters in Germany to attend personally the packing of Fruit-tree stock-shipments to the U. S. A. and Canada. These will begin in December, provided that the weather is favorable. Mr. Heinecken informs us that the extensive sheds and cellars at Messrs. J. Heins' Sons Nursery are never used as store-houses. Everything that is shipped from there is directly taken out of the nursery-grounds. The cellars are only used counting, grading, and packing the stock.

The American office, in Whitehall Building, 17 Battery Place, New York, is taken care of by Mr. Heinecken's brother, who will give applicants all the wanted information, price lists, and booklets, and also furnish the necessary permits for the importation to the numerous customers.

The *Minnesota Horticulturist* for December is before us and contains much valuable information concerning the hardiness of various small fruits and other plants in their vigorous clime. The Minnesota State Horticultural Society must be a live organization to be able to publish a monthly magazine of such undoubted value to the Horticulturists of the State.

Advance sheets from *Monthly Summary of Commerce and Finance* for October, 1912, gives the following report of Imports of Plants, Trees, Shrubs and Vines:

	OCTOBER				TEN MONTHS ENDING OCTOBER					
	1911		1912		1910		1911		1912	
	Quantities	Values	Quantities	Values	Quan.	Values	Quan.	Values	Quan.	Values
PLANTS, TREES, SHRUBS AND VINES:										
Fruit plants, tropical and semi-tropical, for propagating purposes free .....		99					610			12,895
Bulbs, bulbous roots, or corms, cultivated for their flowers or foliage dut.....	16,018	197,111	21,065	218,867	.....	1,149,535	.....	1,447,915	265,069	1,455,910
All other dut.....		228,536		249,381	.....	945,186	.....	956,242	.....	1,033,288
Total .....		425,746		468,248	.....	2,094,721	.....	2,404,767	.....	2,502,093

# THE FUTURE OF THE NURSERY BUSINESS

**An Address delivered before the Western Association of Nurserymen, at Kansas City, Mo.,  
December 12th, by L. C. Stark, Vice-President of Stark Bros.' Nurseries  
and Orchards Co., Louisiana, Missouri**

*By L. C. Stark*

In considering the future of the nursery business, I shall not attempt to touch on subjects, such as replacing, which has been widely discussed, nor will I attempt to discuss such debatable questions as to whether or not the nursery business will continue to be largely handled through salesmen or will eventually become strictly a mail order proposition. Time alone can solve these problems. Also I shall not endeavor to forecast events, or make wild guesses or predictions as to what the future will bring forth. This we can only judge from the past. Future developments can not be foreseen, and any definite predictions I might make would be of little value and very uninteresting to this audience. Probably the next twenty-five years will be much the same as the last twenty-five years. The most marked difference, as I see it, is the renewed impetus the fruit industry as a whole has received by the "back to the land" movement. This movement, as you all well know, was originally a distinctly western idea and largely the result of western energy.

## WESTERN DEVELOPMENT

Western orchardists have been progressives from the very beginning; their methods, judged by old horticultural standards, have been decidedly revolutionary, but these methods have made good and many sections are now following their lead—in fact, all sections have been more or less affected thereby. The western orchardists are to be congratulated on the part they have played in up-building and modernizing horticulture. Not only the orchardists, but also the western nurserymen who have been, to a certain extent, the teachers and advisers of the western orchardists. Many, in fact, all of you, have contributed largely to the great advancement and renewed interest in horticulture which we have witnessed during recent years.

## REVIEW OF THE PAST

In our endeavor to penetrate the future, it may be interesting to look behind us, for we find that American nurserymen have been leaders since the earliest history of our country. Away back in 1794 we find Wm. Prince at the head of a nursery of large proportions at Flushing, Long Island. In his catalog list for that year we find an assortment almost, if not quite, equal in size to that of any of the largest nurseries of modern times. We also find that Prince knew how to advertise, both at home and abroad, and as a consequence, he created a wide market for his products. His exportations went forth to Europe and many other foreign countries.

Upon closer investigation of the Prince Nurseries, however, we find a marked absence of modern push and hustle. Scientific management, as known today, was a thing unheard

of and its application unknown. On the contrary, our great nurseries of the present time are well systematized and are run on a scientific basis, probably equal to that of any of the best institutions of this country.

## PAST VS. PRESENT

In comparing the lists of our modern nurseries to the lengthy lists of Wm. Prince, issued in 1794, we find no great difference in size, however, one feature is conspicuous: Our modern nurseries list more varieties of great worth and fewer sorts of questionable value. Without fear of contradiction, I may safely say that the tendency of the better nurserymen of today is to grow only the best varieties with less regard to the demand, and this is as it should be. The nurseryman should be the dependable adviser of the planter. He should not grow, or sell to his customer, any stock that will not give satisfaction and full value received.

## POSSIBILITIES OF THE FUTURE

Many leading nurseries have now reached such a point in their internal organization that there is slight room for radical improvement or advancement. In planning for the future, we must look beyond the confines of our own business; we must look to the creation of a larger market for our products. This, we believe, is the one great opportunity which the future holds for us. Along these lines we must work out our salvation for the future success of the nursery business. There is only one way to increase to any marked extent the planting of trees and that is to largely increase the consumption of fruit.

## FRUIT A STAPLE FOOD

To accomplish our object, to build our future success on a broad and permanent foundation, all fruit interests, scientists, nurserymen, orchardists, and fruit merchants should co-operate in an active campaign to popularize the use of fruit by the general public and place fruit in every household as a staple food.

To do this, it will be necessary to educate the younger generation up to that point where every housewife will consider her larder just as incomplete without fruit as without flour, sugar or coffee. Such a campaign as this, at first thought, seems impracticable—in fact, almost impossible, however, we believe it is not only feasible, but necessary and sure to come.

## HEALTH-GIVING QUALITIES

We have great possibilities on which to base such a movement, for good ripe fruit is not only of great food value, but

the medicinal qualities of fruits, particularly apples, are well known. Many little incidents proving this fact have come to our notice from time to time.

For instance, a leading physician in one of the largest hospitals in the world recently wrote as follows: "A great many sporadic cases of scurvy come to our eyes in the large cities. Under adequate acid fruit diet, these cases are immediately relieved and eventually cured."

Good fruit has been recognized as a natural food by the medical fraternity for centuries. We recall one incident where a mother once asked the great Alcott how best to rear her boys: Alcott replied: "Madam, teach them the Ten Commandments and give them all the good ripe apples they can eat."

Ex-Senator Cockrell, for thirty years United States Senator from Missouri, is another well known devotee of the fruit diet. For many years the Senator's mid-day meal consisted of a big luscious apple, and thousands of the busiest men in the great cities are following his example. Thus, we have before us an opportunity as yet practically undeveloped.

#### REDUCE HIGH COST OF LIVING

Not only will the greater consumption of fruit increase health, but it will go a long way toward reducing the present high cost of living. People of our country can be educated to use more fruit products as staple foods, just as they have been forced to do in Europe and other countries of the old world, where today we find the population eating proportionately a much larger percentage of fruit and vegetable products and a much smaller percentage of meat than is consumed here in this country. They are greatly benefitted financially and their health is immeasurably better. The consumption of more and better fruit by Americans is bound to increase our physical strength and health.

In the writer's travels in various countries, he has always been struck by the exceedingly small quantity of meat consumed by the healthiest citizens of those countries, namely the so-called "middle classes." We must overcome the American idea of considering fruit as something of a luxury, and when we make the wife and mother realize that good ripe fruit is an absolute necessity for the proper rearing of her children, then we have largely eliminated doctor's bills, have benefitted the health of the Nation, benefitted ourselves and found, at least, one solution of the present high cost of living.

#### PRACTICAL APPLICATION OF THIS IDEA

In a recent issue of one of our leading fruit journals we find an article entitled "Two Hundred and Nine Ways of Serving the Apple." The Editor of this valuable paper is to be congratulated, for this is a big step in the right direction—a true appeal to the housewife. We understand that this article is to be published in pamphlet form and a copy enclosed in every box of apples sent out by the leading fruit growers' associations.

By carrying on such a campaign as this in all the fruit papers and allied publications, there is absolutely no doubt but what fruit consumption can be, in fact, will be, multiplied many times, and just to show you the possibilities of such a campaign, we doubt if many of you gentlemen, can now

think of more than a dozen ways to prepare apples; whereas, the article just mentioned shows the housewife 209 different ways of serving this fruit. The same is more or less true of other leading fruits. I simply use the apple as an example.

#### NECESSARY PROCEDURES

Increased consumption of fruit naturally increases the planting of trees, and this is the ultimate object of our future activities.

As we now see it, to accomplish this object, we must do three things:

*First*, we must solve the problem of supplying every family with good ripe fruit at moderate cost.

*Second*, we must lower the cost of production.

*Third*, we must improve methods of distribution.

Thus, we see the real problem confronting us is to lessen the final cost to the consumer. This can be done—it will be done, and that too without lessening the final net profit to the orchardist or nurseryman.

#### FUTURE ACTION

Circumstances will, of course, largely control our future actions, but one thing is certain—to succeed in a large way, the nurseryman of the future must be progressive—we must be just as active in our own line as other food producers, or those interested in other lines.

To show what can be done by an active co-operative campaign take, for instance, patent breakfast foods: The citizens of this country annually pay millions and millions of dollars for breakfast foods—all as the result of publicity and advertising, for in no other country in the world are breakfast foods consumed as a staple food. When you consider the immense value of fruit as a food and its health-giving properties, I believe you will agree that the American fruit interests at the present time do not receive their full share of the enormous amount of money spent every year in this country for food, simply because the American people consume, compared to foreign countries, very little fruit. It is the business of all fruit interests to see that the coming generation *gets the habit of eating fruit*. That, I believe, is, in a large sense, the key to the future success of the nursery business.

#### A MERRY CHRISTMAS FROM STARK BROS.

A fine box of "Delicious" apples were received at the office of the NATIONAL NURSERYMAN, from Stark Bros. Nurseries and Orchards Co., Louisiana, Missouri.

The fragrance, flavor, appearance and quality of this apple makes it a gift fit for a king. It is fittingly named "Delicious". They were thoroughly enjoyed and much appreciated.

The kind wishes accompanying them are heartily reciprocated.

EDITOR.

NATIONAL NURSERYMAN,

Enclosed please find check for \$1.50 covering subscription of Union Nurseries, Oudenbosch, Holland. Kindly acknowledge.

They write "we find the NATIONAL NURSERYMAN very useful, it keeps us in touch with our friends over there and we could hardly do without it."

Yours truly,  
McHUTCHISON & Co.



## Answers to Correspondents

As I am about to build a cellar for nursery stock I know that you have some reader of your paper that has some experience in building such a cellar, and perhaps at some time or other have written you their experience in building such.

J. J. McEM.

If you will refer to the February, 1912 NATIONAL NURSERYMAN you will find an article dealing with the subject.

I am interested in propagating the fancy varieties of Evergreens as *Juniperus virginiana glauca*, *elegantissima*, *tamaricifolia*, *argentea*, variegated, *sabina* variegated, *Thuja Tom Thumb*, *Warreana*, *Columbia*, *globosa*, *lutea aurea*, *Vervaeana* and others. Will you kindly tell me if it is possible to propagate said kinds by cuttings in cold frames with good success and which would be the best time spring or fall? I believe that for propagating evergreens a propagating house is necessary. Can you tell me what is the reason that evergreen cuttings grow often a too large callus without producing any roots, while others root immediately without making hardly any callus.

Which book is the best for the nurseryman on Fungus, Plant-Disease, Borers, Worms and etc.

M. G. F.

All the evergreens named above may be propagated by cuttings and we see no reason why it should not be done in cold frames, if properly handled. When a cool greenhouse is used, the cuttings are put in the sand during January, February and March, usually at a time when little work can be done out-of-doors. For this reason it is considered best to use a greenhouse. It provides work at a slack time and gets the work out of the way by the time the spring rush comes and the time can be used to better advantage at other work.

Although not being able to speak from actual experience, we should say that early spring should be the better time to put in the cuttings when cold frames are used, as they would not strike until growth became active whatever time they were put in after about November.

Evergreens of the *Arbor Vitae* type strike very readily as do also most of the *Retinosporas*, but the *Junipers* are rather slow to root requiring to be left in the sand until the second spring before being potted off or planted out.

While we cannot give the scientific reason why many evergreen cuttings form a large callus instead of rooting it does seem as if the resinous sap peculiar to these plants had something to do with it. It is a good plan to take up those cuttings that have formed a large callus, cut the callus and put back in the sand when they will begin to make root.

Duggars Fungous Diseases of Plants you will find is a very good work on the subject. Price, \$2.40, and can be supplied by THE NATIONAL NURSERYMAN PUBLISHING CO., 218 Livingston Building, Rochester, N. Y.

What is the best way of applying fertilizers between trees in order to do it in the most economical manner? What is the best chemical fertilizer to use for shade trees, such as, Elms, Maples, Mt. Ash, etc.? What is the best way to apply it and how much do you recommend using per acre?

J. V.

Will some of our readers who have had experience along this line answer this?

I should also like to learn with what success hardwood cuttings made from the following varieties of shrubs can be expected, providing that

they be given care and planted in good soil. About what per cent of them will grow? Any information on this matter will be thankfully received.

*Berberis Thunbergi*, *Berberis Vulgaris Purpurea*, *Spiraea Bumalda*, *Spiraea Anthony Waterer*, *Weigelas*, assorted.

J. V.

Neither *Berberis Thunbergi*, *B. Vulgaris*, *Spiraea Bumaldi* or *Anthony Waterer* strike very readily from hard wood cuttings. They are best propagated from cuttings made from the young growth in the spring or half ripened wood in early fall.

*Weigelas* strike very well from hard wood cuttings. It is possible to get 100 per cent.

## ORANGE GROVES AT THE PANAMA-CALIFORNIA EXPOSITION

G. Harold Powell, manager of the California Fruit Growers' Exchange, which will ship about 50,000 car loads of oranges this year, paid a visit recently to the site of the San Diego Exposition and inspected the model orange grove which will be the main exhibit of the Southern Counties of California. Mr. Powell, who has a record of fifteen years in the Government service in Washington, said:

"Without any doubt, the site you have chosen for your San Diego Exposition is the finest in every way of any exposition site in the last twenty years. That is the limit of my experience with world's expositions, but I've seen them all in that period and I doubt if there was ever a site before that combined such a wonderful view, such magnificent climate and every possible advantage that nature has to offer.

"The orchard which the Southern counties has set out as part of their exhibit is in splendid condition," continued Mr. Powell. "Your people here certainly know how to handle growing things. They have the 'touch', as we say. By 1915 the 800 trees in that orchard will be fine, lusty young specimens with plenty of fruit and blossoms to show the Eastern visitor how they grow citrus fruits in California. It is a mighty fine thing and should be a big feature in later years in your park.

"In fact, the whole planting and permanent building scheme of your exposition will be a mighty big thing for your city in future years, for it will give you a splendidly developed park of great size."

The business office of THE NATIONAL NURSERYMAN is in receipt of a beautiful calendar for 1913 entitled "A Grecian Idyll," after the painting by Henry Ryland, R. I. from George E. Dickinson, 1 Broadway, New York. United States Representatives of Edward T. Dickinson, Nursery and Fruit tree stocks, ornamentals, etc. Chatenay. Seine, France. The calendar is a production of Raphael Tuck & Sons, Ltd., and bears the following verse by Byron: "O'er roses may your footsteps move. Your smiles be ever smiles of Love. Your tears be tears of joy."

## BUSINESS MOVEMENTS

BERLIN, WORCESTER CO., Maryland—The Atlantic Nursery Company has been organized and incorporated. They have purchased the business and stock of the Peninsula Nurseries, D. W. Babcock, proprietor, also 165 acres of fine land for nursery products in addition to what they are now carrying on. They will grow a full line of nursery products. Erect propagating houses for bedding stock, etc. Their great specialty will be the production of first-class material for Forestry and Ornamental planting, seedlings of all kinds for transplanting and lining out. D. W. Babcock, a life-long nurseryman and propagator, becomes manager and secretary of the Company; Robert J. Showell, president and treasurer.

### THE CUNNINGHAM NURSERY COMPANY

Within the next few days our headquarters will be removed from Rising Sun to Seymour, Ind., and we request that you note this change in our address.

Our Fall business is now over and practically all stock has been disposed of at this place. We are greatly pleased with our new location, where we have made rather extensive plantings of young stock the past two years.

# The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

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Editor ..... ERNEST HEMMING, Flourtown, Pa.

The only trade journal issued for Growers and Dealers in Nursery Stocks of all kinds.  
It circulates throughout the United States, Canada and Europe.

Official Journal of American Association of Nurserymen

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

## SUBSCRIPTION RATES

One year, in advance.....	\$1.00
Six months .....	.75
Foreign Subscriptions, in advance.....	1.50
Six months .....	1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Rochester, N. Y.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Address, Editor, Flourtown, Pa.

*Entered in the Post Office at Rochester, N. Y., as second-class matter.*

ROCHESTER, N. Y., JANUARY, 1913.

## AMERICAN ASSOCIATION OF NURSERYMEN

PRESIDENT—Thomas B. Meehan, Dresher, Pa.; vice-president, J. B. Pilkington, Portland, Ore.; secretary, John Hall, Rochester, N. Y.; treasurer, Chas. J. Maloy, Rochester, N. Y.

EXECUTIVE COMMITTEE—H. B. Chase, Huntsville, Ala.; J. W. Hill, Des Moines, Iowa; P. A. Dix, Roy, Utah; T. B. Meehan, Ex-Officio, Dresher, Pa.; John Hall, Ex-Officio, Secretary, Rochester, N. Y.

### CHAIRMEN OF COMMITTEES

TRANSPORTATION—Chas. M. Sizemore, Louisiana, Mo.

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LEGISLATION EAST OF MISSISSIPPI RIVER—Wm. Pitkin, Rochester, N. Y.

LEGISLATION WEST OF MISSISSIPPI RIVER—Peter Youngers, Geneva, Nebr.

CO-OPERATION WITH ENTOMOLOGISTS—L. A. Berckmans, Augusta, Ga.

PROGRAM—Samuel Miller, Milton, Oregon.

EXHIBITS—F. W. Power, Orenco, Oregon.

ARRANGEMENTS—John Hall, Rochester, N. Y.; J. B. Pilkington, Portland, Ore.

PUBLICITY AND TRADE OPPORTUNITIES—W. P. Stark, Louisiana, Mo.; Jefferson Thomas, Harrisburg, Pa.; Orlando Harrison, Berlin, Md.; C. M. Griffing, Jacksonville, Fla.; G. C. Roeding, Fresno, Cal.; H. D. Simpson, Vincennes, Ind.; James M. Irvine, St. Joseph, Mo.

MEMBERSHIP—James McHutchison, New York City.

## STATE AND DISTRICT ASSOCIATIONS.

American Nurserymen's Protective Association—President, J. W. Hill, Des Moines, Ia.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.

American Retail Nurserymen's Protective Association—President, Charles J. Brown, Rochester, N. Y.; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.

Association of Oklahoma Nurserymen—President, J. A. Lopeman, Enid, Oklahoma; secretary, C. E. Garee, Noble, Oklahoma.

Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.

Connecticut Nurserymen's Association—President W. W. McCartney, New Haven, Conn.; secretary, F. L. Thomas, Manchester, Conn.

Eastern Association of Nurserymen—President, Wm. C. Barry, Rochester, N. Y.; secretary-treasurer, William Pitkin, Rochester, N. Y. Meets annually in January.

National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.

National Nurserymen's Association of Ohio—President, J. W. McNary, Dayton, O.; secretary, W. B. Cole, Painesville, O.

Pacific Coast Association of Nurserymen—President, P. A. Dix, Roy, Utah; secretary-treasurer, C. F. Tonnison, Tacoma, Wash. Meets annually in June.

Pennsylvania Nurserymen's Association—President, Abner Hoopes, West Chester, Pa.; secretary, Henry T. Moon, Morrisville, Pa.

Southern Nurserymen's Association—President, W. A. Easterly, Cleveland, Tenn.; secretary-treasurer, A. I. Smith, Knoxville, Tenn.

Tennessee Nurserymen's Association—President, E. W. Chattin, Winchester, Tenn.; secretary, G. M. Bentley, Knoxville, Tenn.

Texas Nurserymen's Association—President, J. R. Mayhew, Waxahachie, Texas; secretary-treasurer, John S. Kerr, Sherman, Texas.

Western Association of Nurserymen—President, Geo. A. Marshall, Arlington, Nebr.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

The California Association of Nurserymen—President, W. V. Eberly, Niles, Cal.; Secretary, H. W. Kruckeberg, Los Angeles, Cal.

## NEW YEAR GREETINGS

The year of 1912 opened with every indication for a year of greater prosperity for nurserymen than any preceding it. The nursery business in general was in a most flourishing condition owing to an unprecedented demand for all lines of stock and at prices of which none could complain and with every indication of very little stock to be ultimately consigned to the "brush pile."

That year is now a thing of the past and while the promises of twelve months ago have not been fulfilled in full measure, nurserymen have had very little to complain of. Fair prices have been maintained, the demand for nursery stock is on the increase and with every prospect that before the spring shipping season there will be more or less shortages in many lines. Even today, particularly in ornamental stock, the scarcity of many varieties is confirmed by the strong prices prevailing and in fruit trees many specific varieties cannot be purchased unless a full line of other sorts are taken.

The outlook for the maintenance of present prices and even higher prices in the next year or two may be predicted by the scarcity of several varieties of French fruit stocks this year.

For the bright prospects for the year of 1913 the NATIONAL NURSERYMAN congratulates its subscribers, its advertisers and others in the trade and wishes one and all a HAPPY and PROSPEROUS NEW YEAR.

The year has not passed without leaving its sad memories. Death has been with us and taken many well known, pioneer nurserymen from our ranks:

Oscar P. Nichols, Davenport, Iowa.

William Smith, Geneva, N. Y.

J. J. Harrison, Painesville, Ohio.

Geo. S. Josselyn, Fredonia, N. Y.

Benjamin Chase, Derry, N. H.

George A. Sweet, Dansville, N. Y.

Joshua I. Maxwell, Geneva, N. Y.

Pliny W. Reasoner, 2d, Oneco, Florida.

THE NATIONAL NURSERYMAN suffered a two-fold loss in the passing away of its Editor, Prof. John Craig, and its Business Manager, Charles L. Yates. The kindly faces of these friends who have passed to the Great Beyond will be sadly missed in the future gatherings of our National Association.

But the Nursery business still goes on and yearly increases in volume. Sons are taking up and continuing the work and responsibilities of their fathers. New methods and standards are in vogue and the nursery trade is year by year more largely assuming the place in commerce to which it is properly entitled.

THE NATIONAL NURSERYMAN too, while mourning the loss of its former Editor and Business Manager will endeavor to continue its usefulness in the future as it has in the past and hopes to merit the confidence of its readers and advertisers.

Again, we wish you all a HAPPY and PROSPEROUS NEW YEAR.

NATIONAL NURSERYMAN PUBLISHING CO.

**CONVENTION  
DATES**

The Executive Committee of the American Association of Nurserymen announce that they have selected June 18th, 19th, and 20th as the dates of the 1913 Portland Convention. That the Committee exercised good judgment in deciding upon these dates goes without question as to the only logical time for holding our meeting. This is the week immediately following the holding of the Rose Festival. Portland is noted for its roses and delegates to the Convention will have opportunity to see probably the finest display of out of door roses which they have ever witnessed. Then too, the famous Oregon Cherries will be in their prime at that period.

What is your duty to the National Association? Are you a member? If not, why have you neglected your duty in this respect?

The American Association of Nurserymen is not working for the good of any one or particular set of men. It is working for the nursery trade of the United States as a whole and it is the duty of every nurserymen to uphold and aid in the good work which the Association is doing.

The Committees on Legislation, Tariff, Transportation, Publicity, etc., are all watching and furthering your interests, and leaving no stone unturned to prevent the passing of drastic legislation in the various states and by the National Government or of the establishing of unjust freight rates and classifications by the railroads. The Association is paying out thousands of dollars annually in thus watching your interests. Are you doing your part in upholding the organization? It only asks your membership in the Association.

This is something you should think over and if you have not done your part in the past, do it now and send a check for \$5.00 to James McHutchison, 17 Murray St., New York, the Chairman of the Membership Committee and ask him to enroll you as a member of the Association. Do not let others support the work which is benefitting you. Bear your share of the burden.

**THE GOLDEN  
RULE**

There are times when we think the Golden Rule is only good for Sundays and family use and that it is no good at all in the strife of business life and we are more apt to use the rule "Do them or they will do you!"

But the man who has his ear to the ground listening to the trend of business and who is really building a business that will be a success and one that he may be proud of will readily recognize the signs of the times and they are that you must treat others as you would like them to treat you. Sharp practice even if it be legal is not good business. Some businesses seem to thrive under a set of rules of their own making and the nurseryman looks with envy on apparent enormous profits which are beyond the wildest dream in his own business. He sees the dry goods man turning his stock three or four times a year and making a profit of 20 to 40 per cent. He turns his own stock once in one to eight years and then is not quite sure if he made any profit or really sold at a loss, but there is a compensation balance at work that insure the nurseryman getting as much out of life as other professions and it is a poor nurseryman that does not think that he has

the finest profession in the world if he can only strike the gait that leads to success.

Not long ago shrewdness and sharpness were the qualities that won success in the business world, all that is changing and before many years unclean methods will be unknown in business life. The foundation of the greatest houses in this country are reliability and honesty. The world is beginning to see that even from a utilitarian standpoint it pays to be honest.

Occupation invariably leaves its mark on the man and where do you find a finer body of men than the representative nurserymen of the United States? And these are the men who are founding the nursery business and to be among these leaders, you must go even to step further than mere honesty. You must do unto others as you would they should do unto you.

**WESTERN NEW YORK HORTICULTURAL SOCIETY  
MEETS****SECRETARY JOHN HALL AGAIN ELECTED**

The 58th Annual Meeting of the Western New York Horticultural Society was an undoubted success.

The splendid exhibition of fruit, etc., attendance and interest displayed was an inspiration and points very definitely to an enthusiastic development of the horticultural resources of the state.

There is evident harmony between the scientific men from the New York Agricultural College and Experiment Station and the practical commercial fruit growers and nurserymen of the state and this is bound to work to the benefit of all concerned. This condition of things is doubtless due to the able management.

The Society is to be congratulated on the re-election of the able president, Wm. C. Barry, and secretary, John Hall.

Nurserymen attended in force from different parts of the country. Among the out of state nurserymen seen there were John Dayton, James McHutchison, Thomas B. Meehan and Adolph Mueller.

The program was very varied and interesting, covering subjects of vital interest to the fruit grower and horticulturist in general.

**MEETING OF EASTERN NURSERYMEN'S  
ASSOCIATION**

At a meeting of the Eastern Nurserymen's Association held at Rochester, December 11th, 1912, there was a general discussion on the subject of tariff, and the following resolution was unanimously adopted:

"Resolved, That the Chairman of the Tariff Committee, Irving Rouse, be instructed to make every possible effort to keep the present duty unchanged."

The present officers were re-elected.

Every nurseryman wants stock at some time or other and wants it bad. Advertise your own stock for the benefit of the other fellow. He will do the same for you in the NATIONAL NURSERYMAN, so don't ignore his efforts.

Read the advertisements they will be as profitable to you as the text, if not more so.



## O B I T U A R Y

### CHARLES DINGEE

At his home in West Grove, Pa., Nov. 29, Charles Dingee, dean of the Rose growers of America, died in his 88th year. He was one of the most successful business men in the State, and one of the best known and generally loved residents of this county.

Charles Dingee was born in Lancaster County, Pa., Jan. 1, 1825, and spent his early life there studying agricultural life, flowers and soils, his early horticultural apprenticeship being served with Edward Jessup, one time a very noted nurseryman at York, Pa. When he was twenty-five years of age he entered into business and, with his brother-in-law, Isaac Jackson, he established the Harmony Grove Nurseries at West Grove. While in this venture he became familiar with the needs and qualities of Roses and in 1872 he incorporated the Dingee & Conard Co., and began the present system of shipping Roses by mail.

He wrote the first catalog offering Roses by mail that was ever sent out in this country. Horace Greeley was a warm personal friend, and he used the *New York Tribune* for his first advertisement. He has often been heard to say that he never got a single reply from it. It was a few years after this that the company began advertising extensively and the results were such that the post office department at Washington, D. C., was astonished at the vast amount of business done at West Grove and sent a special inspector there to see if something was not wrong in connection with the management of the office. The inspector returned to the national capitol with word that all the business was legitimate, and the Dingee & Conard firm enjoyed a fine reputation at home as well as in many sections of the country. Since then the shipping of Roses has increased until the West Grove plants are known in every quarter of the civilized world. The firm is recognized as among the largest in the country in its specialty. The business of the Dingee & Conard firm was sold to its present management, P. J. Lynch, M. Henry Lynch and James D. Headly, all brothers-in-law, in 1903. Mr. Dingee was retired from business since that time.

Mr. Dingee was a member of the Masonic Order and belonged to Chapter No. 52, Royal Arch Masons, of Lancaster, whose members, recognizing him as the eldest of their number about two years ago sent a delegation to his home to present him with a loving cup. He was the second eldest

member of the Union League, Philadelphia, and as long as he was able to, visited the headquarters in that city and was glad to meet his old friends there.

He was the founder and for years a director of the National Bank of West Grove, and a close personal friend of the late Alfred P. Reid, a former burgess of West Chester, and for years the president of the First National Bank.

Mr. Dingee was very prominent in public life, particularly during the years surrounding the activities of the Civil War. He was a warm personal friend of Thaddeus Stevens, the great commoner of Pennsylvania, also of Gen. Simon Cameron, secretary of war in Lincoln's cabinet, afterward senator from Pennsylvania, and a life-long friend of Wayne McVeigh, the attorney-general in Cleveland's cabinet and afterward ambassador to Italy. He was a close friend of

Peter Henderson, Patrick Carry and the elder Downing, and was an active participant in the meetings of horticultural societies of their day. When his business was first established there was no railroad here. The mails were brought in from a distance of twenty-five miles, and all outgoing shipments were hauled the same distance. He was the last living witness of the Christiana riot, which has come to be known as the forerunner of the Civil War. He was present on the occasion when the riot took place. He was a man of great force of character, and was a dominant figure even in the councils of strong men during his active life.

He traveled extensively, visiting nearly all the United States and several European countries. In 1903 he retired from active business and turned over the management to his brothers-in-law, Patrick Joseph Lynch and Henry Lynch, who have

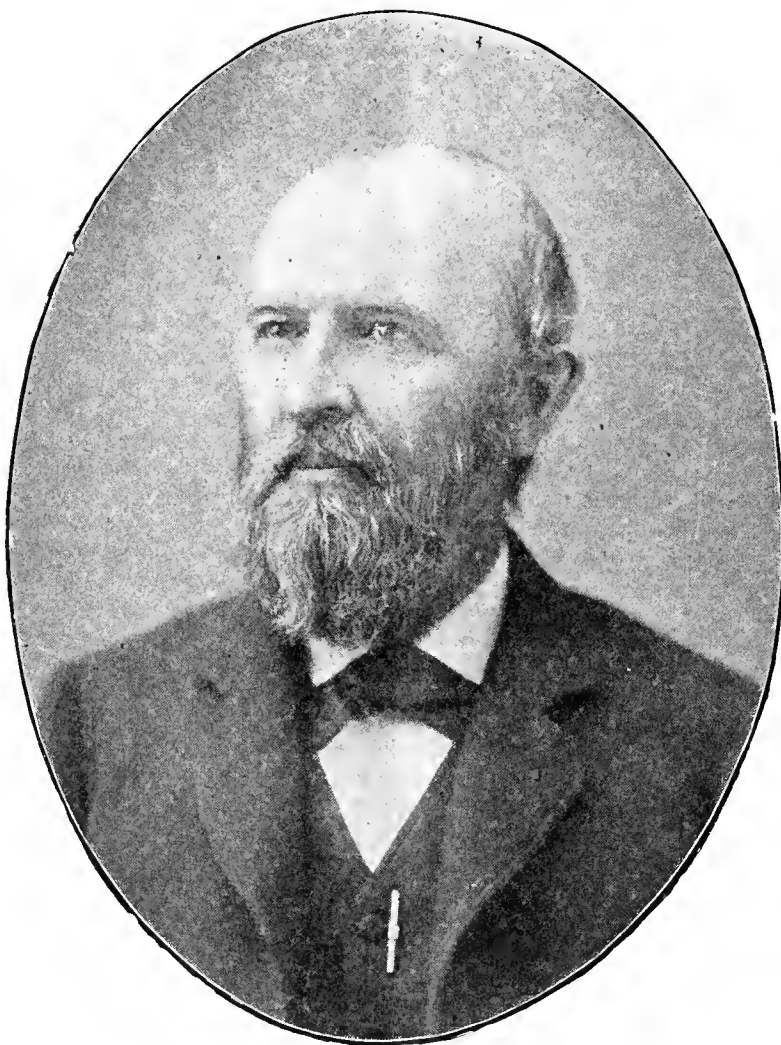
since been looking after the affairs, increasing the general scope and establishing branches, one of which is in New Castle, Ind.

Sixty-five years ago Mr. Dingee married Elizabeth Jackson of West Grove, who died in 1881, leaving him two children, William J. Dingee, of New York City, who has recently been on the Pacific Coast, and Mary D. Price, who is living at Highlands, N. Y. His second wife, who survives him, was Mary E. Lynch, of West Grove, who is the mother of one daughter, Marian, wife of George Barnard, of New Castle, Ind.

Mr. Dingee was reared as a member of the Society of Friends.—*Florists' Exchange*.

### PROF. W. A. BUCKHOUT

BELLEFONTE, Pa., Dec. 3.—William A. Buckhout, professor of botany at State College, died suddenly, early to-day of heart disease. He was a native of Oswego, N. Y., and was



THE LATE CHARLES DINGEE



sixty-six years old. He was one of the oldest professors in point of service at the college.

Prof. Buekhout was married to Miss Mary Harkness, of Philadelphia, who survives with four children.

Readers of THE NATIONAL NURSERYMAN will regret to learn that J. W. McNary, of Dayton, Ohio, has been ill for the last three months. We trust that he will soon be about again, and in good health.

should be made in the name of the Hawthorne Memorial Association, and sent as above.

All contributors become Associate Members of the Association, and will thus have their names always linked with a tribute to genius, which, tho' long delayed, will be measurably adequate.

### FLORAL ART IN PORTLAND

The illustration shows an exhibit at the first of a series



PORTLAND FLOWER SHOW

### SPECIAL MEMORIAL TO NATHANIEL HAWTHORNE TO BE ERECTED IN SALEM, MASS.

#### His Genius Recognized in Fitting Manner

The Hawthorne Memorial Association has become incorporated in Salem, Mass., for the purpose, in the words of its charter, "of the erection or establishment and maintenance of a memorial to Nathaniel Hawthorne in the city of Salem, Massachusetts."

Those interested may get full information and literature by addressing Harlan P. Kelsey, Secretary, The Hawthorne Memorial Association, Salem, Mass., and contributions

of flower shows to be held in Portland, occurring probably about every three months. The show just held was given in the interest of charity and was largely attended. Although a few amateurs had exhibits, the show as a whole, was assembled by professionals, seedsmen, florists and nurserymen. A new red carnation, the "J. N. Teal," was named in honor of one of Portland's prominent citizens, and an exhibit that attracted much attention was a "mum" grown by Louis W. Hill which had thirty or more varieties and colors on one plant.

The illustration shows originality even for a flower show and visiting nurserymen who go to the convention next June may expect to see things.

### J. B. PILKINGTON

Mr. Pilkington will be one of the prominent lights at the annual convention of the American Association of Nurserymen next June, which will be held in the city of Portland, Oregon.

He is not only vice-president of the Association but also the chairman of the Committee on Arrangements. To him will fall the duty of selecting hotel headquarters, Convention Hall, Exhibition room and the thousand and one things pertaining to the comfort and pleasure of the members.

Those who have a personal acquaintance with Mr. Pilkington know that all these matters are in good hands and that as the success of the convention rests on his shoulders its success is assured.

He is an indefatigable worker and a prince of entertainers. Assisting him in making the arrangements for the convention are many prominent coast nurserymen, all of whom are striving to make the 1913 convention a memorable one. Mr. Pilkington is engaged extensively in the nursery, seed and plant business in Portland.

### NOTES OF THE PANAMA-CALIFORNIA EXPOSITION

SAN DIEGO—"An acre of ground and a living" is not a joke in Southern California, and the management of the Panama-California Exposition at San Diego in 1915 proposes to prove it to the satisfaction of every "Missourian" or other doubting Thomas. One of the unique and interesting places of the exposition will be that section devoted to the "Little Landers."

A tract, a dozen of which might be found within Balboa Park, has been set aside for this demonstration. There the visitor will find "farms" of one, two and three acres in extent, each with its home, its dependent family, and these families will be living there just as thousands of small home owners in this State are living, with no other source of income than from the tiny patch of land. While residing in the heart of the exposition grounds, they will be as entirely dependent upon the resources of these little tracts as are the many families in the State having no other resources than their insignificant land holdings.

Such "Little Landers" are found all over California. They constitute the business backbone of many communi-

ties. It is a part of the business of the San Diego exposition to show what man can do when he applies brain and sinew to natural resources, not only in California, but anywhere in the United States and other countries where humanity is making progress.

### PENINSULAR HORTICULTURAL SOCIETY

The 26th annual convention of the Peninsular Horticultural Society will open in Wilmington, Delaware, in the duPont auditorium, Tuesday morning at 10.30, January 14, 1913, and continue in session until Thursday afternoon, January 16.

"This will be the most interesting and profitable and by far the most largely attended horticultural convention ever held in this part of the United States," was the statement made yesterday by Wesley Webb of Dover, Delaware, Secretary of the Peninsular Horticultural Society.

"There will be an unusually fine fruit and vegetable exhibit in connection with the convention," continued Mr. Webb. "The sixth annual Delaware State Corn Show will open the last day of our convention, continue all of the following day and will be a great attraction to those who come to our convention. The program which will be presented by the Horticultural Society is of special and unusual interest and with the fruit exhibit and the corn show will bring to the convention hundreds of leading horticulturists and agriculturists from all over the States of Delaware, Maryland, Vir-

ginia, New Jersey and Eastern Pennsylvania. I shall not be surprised if the attendance is double what we have had on any previous occasion."

"Arrangements have been made with the railroads to sell excursion tickets to the convention in Wilmington and return, at the rate of two cents per mile each way. The Wilmington Chamber of Commerce will see to it that every visitor to the convention is provided with good hotel accommodation. The duPont auditorium, where the convention will be held, is one of the largest and best equipped convention halls in America."

If J. Horace McFarland did not advertise he would not be a leader in his line. He knows how to advertise and where.



J. B. PILKINGTON

Chairman of the Committee on Arrangements for the Convention to be held at Portland next June



### PRESIDENT'S ADDRESS

At meeting of Western Association of Nurserymen, held at the Coates House, Kansas City, Mo., December 11th and 12th, 1912.

As this is our twenty-third anniversary, a short history of our Association might be of interest to our members.

A movement was started to form the Western Association of Nurserymen in 1890. The organization was completed at the meeting held January 6th, 1891, at Kansas City, Missouri. H. T. Kelsey was elected president, R. H. Blair, vice-president, and Frank Worcester, Ft. Scott, Kansas, secretary and treasurer. Col. Pearsall was elected secretary and treasurer at the Topeka meeting in January 1892, and served in this capacity until 1900, after which our present worthy secretary has served for a period of twelve years.

Membership at the time of Kansas City meeting, as shown by Secretary's minutes, at meeting held July 14th, 1891, was as follows: Hart Pioneer Nurseries, Kelsey & Co., A. C. Griesa & Bro., D. S. Lake, J. A. Bayless, Blair & Kaufman, G. J. Carpenter Co., Taylor Bros., Omaha, Nebraska, Youngers & Co., Blair & Tippie, Bush Son & Meissner, Lewis Williams, A. H. Griesa, John Mentch, William Cutter & Son, L. R. Taylor of the firm of Taylor, Peter & Skinner, became members at this meeting, making the sixteenth firm represented. At the present time, we have sixty-three firms represented, a good, healthy growth.

Our presidents have been as follows: H. T. Kelsey, elected in 1891, continuing as president until the time of his death in 1895; D. S. Lake succeeding him, being elected December 17th, 1895, followed by A. L. Brooke, elected at the summer meeting 1896, serving until 1903; followed by F. H. Stannard, Peter Youngers, A. Willis, E. P. Bernardin, J. H. Skinner, and George A. Marshall.

There are but few of the charter members left, although many of the same firms are represented by their successors. Twenty years brings many changes. During this period, death has invaded our ranks and removed a number of our most faithful members. I think that the good accomplished by the organization fully justifies the wisdom of its organizers, and that it has a greater opportunity for future work.

You are all familiar with the action of this Association at our last meeting with reference to a federal law, governing important shipments, and the able efforts of our legislative committee, composed of W. P. Stark and Prof. S. J. Hunter, towards securing the enactment by Congress of a federal inspection and quarantine law. There are, of course, differences of opinion among nurserymen throughout the United States, as to the wisdom of our action; but I believe the law will be wisely and sanely administered by the Federal Horticultural Board, and that good results will follow its administration. The nurserymen should co-operate with the inspectors in securing thorough inspection of all import stock, at destination, and in keeping their own premises free from dangerous insects and disease.

There will be many state legislatures in session during the ensuing winter, and no doubt, many new laws will be proposed. Our members in the various states should take an active interest in all legislation, working to secure uniform state laws, and against the enactment of laws that will

prevent the free movement of nursery products between the various states.

In some states, the inspection laws do not protect the nurseryman's premises from infectious diseases that spread from neglected orchard trees. This condition should be remedied, and such neglected trees should not be permitted to stand as a menace to horticultural interests generally.

Tariff revision will be taken up by Congress during the ensuing year; as president-elect Wilson has announced that he intends to call Congress in extraordinary session next April, to revise the tariff. This is a question of vital interest to the membership of our Association, and one that should be given attention.

It is possible an effort will be made to have the duty removed from apple seedlings and other fruit tree stocks. This would practically destroy the business of growing apple seedlings in the United States, commercially.

Our American nurserymen, with high priced labor, land, and seed, could not compete with the foreign growers. This is especially true because the foreign stocks are quite generally grown by small farmers, the family doing most of the work. Judging by the cost of other fruit tree stocks, after American competition was eliminated, there would be no saving to the consumer, as the foreign nurserymen seem to be able to regulate or control prices. I would recommend the appointment of a tariff committee by this Association, to co-operate with the tariff committee of the American Association.

There are but few callings where competitors meet in friendly council and exchange ideas and experiences so freely as do the nurserymen. However, there should be more uniformity in both wholesale and retail prices, so that each may receive the full benefit of his labor and investment. There is too much of a tendency among nurserymen, where there appears to be a surplus in any line of stock, to demoralize prices. Many of us are overlooking the fact that such unbusiness-like methods frequently keep prices below cost of production; until there is an actual shortage, when prices advance to an excessive rate. Such conditions are detrimental to all branches of the business, creating an unstable market and tempting many inexperienced men to embark into growing nursery stock, who in turn help to bring about the condition we should strive to avoid.

In other words, we, as nurserymen, are operating along crude lines in this respect, and are not keeping pace with the progress made in most other lines of business.

I think nurserymen will generally agree with me, that in selling stock at retail through agents, more honorable business methods are being followed, and that our patrons have more confidence than formerly in the nursery salesman. There is still room for improvement. We should all discourage disreputable methods of securing business, and exert our influence towards bringing the business to a higher plane. Crooked methods of agents or others in securing business reacts against us all, discouraging planting, and bringing the nursery business in disrepute.

The ever-changing and shifting business conditions makes it a difficult problem for the nurserymen to decide what to plant. For several years there has been a boom

in orchard planting. The profits of some of the most successful orchardists have been advertised nation-wide by promoters, magazines, and horticultural publications. As a result an unprecedented demand was created for some lines of stock, and nurserymen were unable to grow fast enough to supply the demand, and many new growers embarked in the business, expecting to reap a fortune. A reaction always follows a boom of this kind, as it creates an unhealthy condition, and many nurserymen without an established trade get caught with a surplus of stock that is difficult to market. With this condition facing us in some lines of stock, the question of what to plant for the market two or three years hence is a difficult one.

My advice is to grow a well balanced stock of the staple, hardy lines of nursery stock, that are always in demand, and avoid overplanting. It is better to grow less than you can sell, than a surplus.

We are citizens of the greatest nation in the world, and as nurserymen have a responsible place to fill in the proper development of our country, and should strive to live up to our opportunities. While there always will be many obstacles to overcome, in my judgment, the nursery business has a bright future, for with the growth and development of our country there will be an ever-increasing demand for our product, and those who plant wisely and produce stock of high quality, will not fail to find a profitable market.

In closing, I wish to urge all the members of our Association to attend the meeting of the American Association of Nurserymen, at Portland, next June. I anticipate one of the best meetings in the history of the association, and besides you will get the benefit of one of the grandest scenic trips in the world.—E. S. WELCH.

#### **A NEW YORK STATE FORESTRY ASSOCIATION TO BE ORGANIZED AT SYRACUSE IN JANUARY**

Last May the Conservation Commission called at Albany a Conference for the discussion of the Forestry problems of the State. This Conference was made up of representatives from nearly all of the Colleges and Experiment Stations interested in any phase of Forestry. There were representatives from the State Agricultural Experiment Station at Geneva, the Department of Forestry in the College of Agriculture at Ithaca, the Schools of Agriculture at Alfred, Canton and Morrisville, from the Department of Agriculture at Albany and the New York State College of Forestry at Syracuse University. A committee was appointed to consider the organization of a State Forestry Association and Dr. Hugh P. Baker, Dean of the New York State College of Forestry at Syracuse University, was elected chairman.

During the Summer and Fall this Committee sent out over a thousand letters to members of the American Forestry Association, the National Conservation Association, the Camp Fire Club and others in New York interested in Forestry. They were simply amazed at the interest shown in the large number of replies received. Almost without exception these replies were in favor of a State Forestry Association formed upon liberal and absolutely non-political lines, whose interests will be Forestry only and whose work

will be the very general development of Forestry throughout the State and the bringing together of all the people interested in any way in this subject.

The various organizations interested in the protection of the Adirondacks and in the protection and propagation of our fish and game animals, have taken the very liberal attitude that the State and the need are large enough to justify the formation of a strong Forestry Association. It may seem advisable for the Association to publish a paper or magazine monthly or quarterly devoted entirely to the interests of New York and it is believed that everyone interested in any way in the development of our forests will support this movement. The Association will have for its field not only the development of Forestry in the Adirondacks and Catskills but will aim especially to help the small land owner and the farmer in the proper utilization of the great area of 7,000,000 acres of idle lands now enclosed within the farms of the state.

An attractive program will be presented at the one-day meeting which will be held in Syracuse on January 16th. Mr. Gifford Pinchot of Washington and many other notable workers along Forestry lines will be present. As soon as definitely outlined, the program will be issued and sent broadcast through the State and it is believed that many will come for this first organization meeting.

#### **NOTES FROM THE NORTHERN NUT GROWERS' CONVENTION AT LANCASTER, PENN., DEC. 23, 1912**

There is a good market for English Walnut trees in the north, preferably trees grown from northern seed or budded and grafted on either English or Black Walnut stocks.

In budded or grafted trees, scions should come from trees of known hardiness, productiveness, regular bearing and good quality nut.

Grafted or budded trees come into bearing in two or three years, in many instances.

So far none of the Chestnuts are immune from the blight. It has attacked native, Japanese and European varieties. The blight can be kept down in orchards or nurseries by cutting out and burning all infected parts. It is estimated that the cost of caring for orchard trees to keep them free from blight is less than the cost of spraying apples for scale.

About four or five good varieties of hardy Pecans were exhibited. Indiana, Posey, Bousseron, Major and Green River were the best. There is a good market for hardy Pecans, budded trees of good variety.

The following officers were elected for the coming year: President, Mr. Littlepage, of Indiana; vice-president, C. A. Reed, Washington, D. C.; secretary, Dr. W. C. Deming, Westchester, New York City.

#### **NEW BULLETIN OF INTEREST TO NURSERYMEN AND FRUIT GROWERS**

The One-Spray Method in the Control of the Codling Moth and the Plum Cureulio. By A. L. Quaintance, in Charge of Deciduous Fruit Insect Investigations, and E. W. Scott, Entomological Assistant. (Bulletin 115, Part 2, Bureau of Entomology,) Washington, D. C. Price, 5 cents:

## From the Experiment Stations

### FIGHTING THE CHINCH BUG WITH FIRE

The chinch bug cost the state of Missouri, approximately \$5,000,000 this year. Unless immediate steps are taken to destroy the swarms which are living over during the winter this loss will be greatly increased next year.

Between now and December 1st, all meadows, pastures, roads, waste lands and other fields, which are heavily overgrown, should be carefully examined for the hibernating chinch bugs. Those fields near wheat and corn fields which were infested last summer should be examined with special care. The insects hide deep down in clumps of grass, under leaves and rubbish and in many cases their presence can be detected from the disagreeable odor of the crushed bugs, even before one finds them in their hiding places.

Wherever they are found, the fields should be burned over immediately and carefully so that every possible shelter will be destroyed. The wind should not be too strong so that the heat will penetrate down into the clumps of grass and make a clean job. Farmers should co-operate in burning over all public highways and railroad right-of-ways in the infested regions. With careful, systematic burning of all harboring places in the fall, a large per cent of the millions of hibernating bugs will be killed by the heat directly and many more left exposed to the winter. After each and every farmer has done all he can to destroy the pest during the winter, the fight will be well enough started so that, if taken up in time next summer, the injury from the pests may be greatly reduced.

UNITED STATES DEPARTMENT OF AGRICULTURE  
OFFICE OF THE SECRETARY  
WASHINGTON, D. C.

December 5, 1912.

#### HEARING ON PROPOSED QUARANTINE AGAINST SUGAR CANE

The attention of the Federal Horticultural Board has been called by the Bureau of Plant Industry and the Bureau of Entomology to the fact that dangerous plant diseases and insect pests are liable to be introduced into the United States on sugar cane brought into this country. Therefore, in accordance with the Plant Quarantine Act of August 20, 1912, a public hearing will be held to consider the advisability of restricting or prohibiting the importation of sugar cane into the United States. If the proposed quarantine is established it will probably restrict or prohibit the importation of all sugar cane plants and parts of plants from foreign countries into the United States, including Porto Rico and Hawaii, and also from Porto Rico and Hawaii into the continental United States.

The public hearing on the proposed quarantine against sugar cane will be held at the Department of Agriculture, Washington, D. C., on January 7, 1913, at 10 o'clock, A. M. At this hearing those interested may appear and be heard either in person or by attorney in relation to the proposed quarantine.

UNITED STATES DEPARTMENT OF AGRICULTURE  
OFFICE OF THE SECRETARY  
WASHINGTON, D. C.

December 4, 1912.

#### NOTICE OF PUBLIC HEARING ON THE MEXICAN ORANGE FRUIT FLY

The Department of Agriculture has information that a dangerous fruit fly known as *Trypeta ludens*, which attacks oranges, mangoes, peaches, guavas, plums, sweet limes, and other fruits and vegetables, is widely distributed in Mexico and may be introduced at any time into the United States.

The State of California has established a quarantine prohibiting the entry into the State of the products mentioned from Mexico and Central American ports, and has provided for the confiscation and destruction of such fruits wherever found in California. Mexican fruits, particularly oranges, are, however, now coming into the United States in quantities from Mexico, through various gulf ports, and being

widely distributed. Furthermore, the investigation of this insect by Experts of the Department of Agriculture and others, has fully established the danger of the importation and establishment of this fruit fly in citrus districts bordering the gulf from whence it could easily be carried to other states.

Under Section 7 of the Plant Quarantine Act of August 20, 1912, it becomes the duty of the Secretary of Agriculture to consider the advisability of restricting or prohibiting the importation from Mexico of the fruits and vegetables mentioned and others that may carry the insect.

In compliance with the Act, a public hearing will be held at the Department of Agriculture, Washington, D. C., at ten o'clock on January 8, 1913, in order that all persons interested may have an opportunity to appear and be heard concerning the establishment of a quarantine on certain fruits coming from Mexico into the United States, to prevent the introduction of the Mexican fruit fly *Trypeta ludens*.

The U. S. Department of Agriculture has issued a report on the Soil Survey of Monroe County, New York, made by the Bureau of Soils in co-operation with the officials of the New York State College of Agriculture. The county is located along the southern shore of Lake Ontario.

The Dunkirk soils are suited to all general farm crops and furnish the bulk of the fruit soils of the county. The Dunkirk silt loam is the best for apples and pears, and is the best soil for nurseries. The fine sandy loam, fine sand, and the lighter phase of the silt loam are the best for the production of peaches and cherries. The silt clay loam and heavier areas of silt loam are best for grain and grass crops, while the fine sand and fine sandy loam are the best suited for potatoes.

UNITED STATES DEPARTMENT OF AGRICULTURE  
OFFICE OF THE SECRETARY  
WASHINGTON, D. C.

November 25, 1912.

"The situation which confronts the wood-using industries embraces conditions which are certain to work against the continuation of the present methods of production and organization. The influence of some of these is already felt to a degree that makes continued profits along present lines extremely uncertain," is the statement made in Bulletin 120, Forest Service, soon to be issued by Secretary Wilson. The document deals with tendencies of forest utilization. Continuing, the bulletin says: "Production has outrun consumption until a condition of over-supply has been reached. This has prevailed without much change for four years.

"Side by side with the present overcutting exists an excess capacity of production, amounting in some of the principal timber states to from 50 to 100 per cent. This excess of capacity facilitates over-production whenever conditions become in any way favorable.

"Efforts to safeguard the timber supply against the ill effects of fire, windfall, insects, and wasteful lumbering have been successful to a degree which insures a continuation of the timber supply for many years to come.

"The increased use of substitutes for wood has brought the demand for lumber almost, if not quite, to a standstill and promises still further to decrease the demand in the future.

"Prices for medium and low grades of lumber have remained practically at a standstill since 1907 and cannot advance to any extent without opening the door still wider to substitutes.

"It is obvious that future profits must come from increased utilization—from the manufacture of products which will absorb the material now wasted or utilized without profit—rather than from increased prices. Mere adjustment of total supply to demand will scarcely meet the situation. A method must be found to limit for each grade the quantity produced to that actually needed for consumption. With higher grades this will not be difficult; there exists no oversupply in these. Year by year the quantity required is about the same as that produced. It is with medium and low grades that the difficulty will come. It is in their case that oversupply prevails and competition rules. To reduce the quantity of low grades it will be necessary to find other avenues of use for the material which now goes into them. Obviously, the problem calls for the most thorough study. Possible starting points, however, are not lacking. One such point is found in



the fact that the minor wood-using industries are going to the forest for their raw material, when in many cases inferior materials from the sawmills would fully meet their needs. Approximately 75 per cent of the 140,000,000 railroad ties used each year are hewed. These could as well be sawed. By making the ties at the sawmill a considerable part of the timber now going into inferior lumber could be turned to that use. Moreover, such material comes from top logs and from hearts of large logs, which are often so knotty as to throw the lumber into the lower grades. Hewed ties now come from the best middle-sized growing trees, which in 25 years would make excellent saw timber.

### TEXAS STATE HORTICULTURAL SOCIETY

The midwinter meeting will be held at Houston, January 16th and 17th, 1913, in the banquet hall of the Bender Hotel. A splendid program has been arranged for the two days. A luncheon will be tendered the members of the Texas State Horticultural Society, when Sam H. Dickson will preside as toastmaster.

#### *Morning Session*

*Thursday, January 16, 1913, 9:30 A. M.*

Prayer—Rev. William States Jacobs, Houston.

Address of Welcome, in behalf of the city—W. C. Munn, President of the Houston Chamber of Commerce, Houston.

Address in behalf of the citizens of Houston and the Horticulturists of South Texas—Sam H. Dixon, Houston.

Response—M. Falkner, Waco.

Japanese Fruits which may succeed in Texas—S. Aria, Alvin.

Insects and Diseases of Citrus Fruits—I. E. Cowart, member Senior Horticultural class of the A. & M. College of Texas.

#### *Afternoon Session, 2:00 P. M.*

The Future of the Fig Industry and the Northern Limit—J. C. Carpenter, Houston.

Canning Fruits and Vegetables for Profit—O. R. Hamilton, Franklin.

The Bee in Horticulture, the Mission of the Bee in Cross Pollination—Louis School, New Braunfels.

Insects and Diseases of the Peach—E. L. Ayers, member of the junior Horticultural class of the A. & M. College of Texas.

Picking and Packing of Fruit—M. H. James, Jr., member of Senior Horticultural class of the A. & M. College of Texas.

Notes from the Rio Grande Horticultural Society—E. Pomeroy, Donna.

#### *Evening Session, 7:30 P. M.*

Address on Some Horticultural Subject—P. L. Downs, Temple.

The Importance of a Commercial Grove of Pecans—J. M. Ramsey, Austin.

Insect Pests of Pecans and Other Nuts—Harper Dean, Assistant State Entomologist, College Station.

Combination Orchards—W. A. Stockwell, Alvin.

#### *Friday, January 17, 1913, 8:30 A. M.*

Insects and Diseases of the Grape—E. W. Laake, member of the Senior Horticultural class of the A. & M. College of Texas.

Combination Fruit and Poultry Farm—Mrs. Benigna G. Kalb, Crockett.

Tree Surgery—D. T. Stevens, member of the Senior Horticultural class of the A. & M. College of Texas.

Echoes from the National Nut Growers' Convention—E. W. Kirkpatrick, McKinney.

Entertainment of the National Nut Growers' Association for 1913, discussion led by Sam H. Dixon, Houston.

Noon-day luncheon tendered the members of the Texas State Horticultural Society in the Grill room of the Bender Hotel—Sam H. Dixon, toastmaster, Houston.

#### *Afternoon Session*

Given over to the Committee on Entertainment.

### AGRICULTURAL LABOR

The Secretary of Agriculture has issued a report on farm labor which, he says, is "relatively a diminishing element" on account of the rapid increase of industrialism. According to census reports, 83.1 per cent of all persons reported to be engaged in gainful occupations in 1820 were employed in agriculture. This class of labor dropped to 77.5 per cent in 1840, 47.3 per cent in 1870, 44.1 per cent in 1880, 37.2 per cent in 1890, and 35.3 per cent in 1900. In the same time the number of persons actually gainfully engaged in agriculture increased from 2,068,958 to 10,249,651.

### NEWS ITEMS

F. A. Huntley, official horticulturist for the state of Washington, has received notice from the United States government that he has been appointed United States inspector for the port of Seattle, in addition to his state duties. Seattle is one of two new ports of entry for horticultural inspection recently created on the Pacific coast, the other being San Francisco.

John Dunbar, assistant superintendent of parks at Rochester, N. Y., has informed friends that he has discovered a new hybrid hickory in Riverside cemetery, a cross between the bitternut hickory and the shagbark hickory. The nut, which is of unusual size, measuring one and one-half inches or more in length, is rich and sweet. Mr. Dunbar considers the variety will without doubt prove a welcome addition to our native American nut bearing trees. It is understood a quantity of nuts will be sown this season and a number of grafts will be made.

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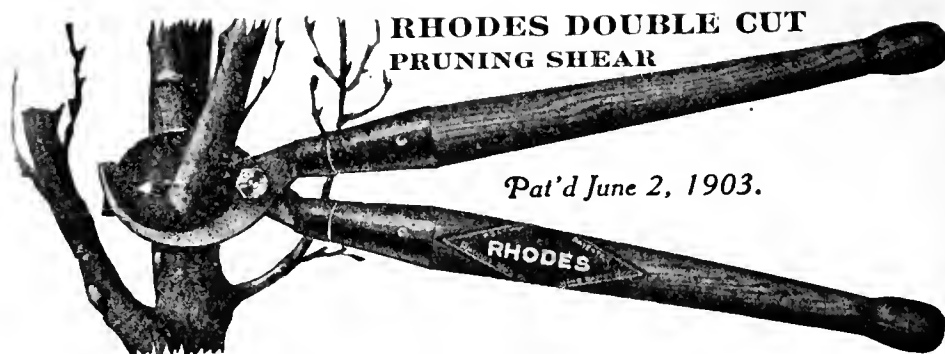
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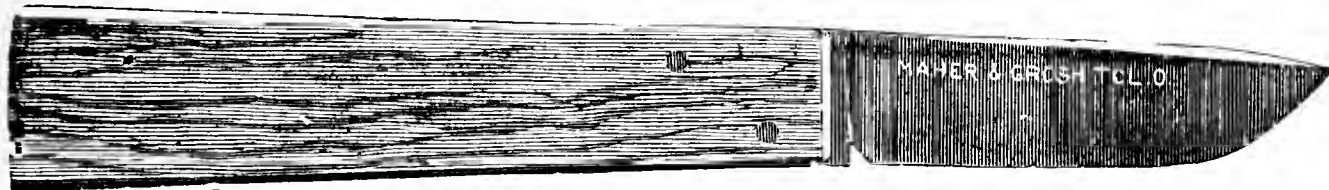
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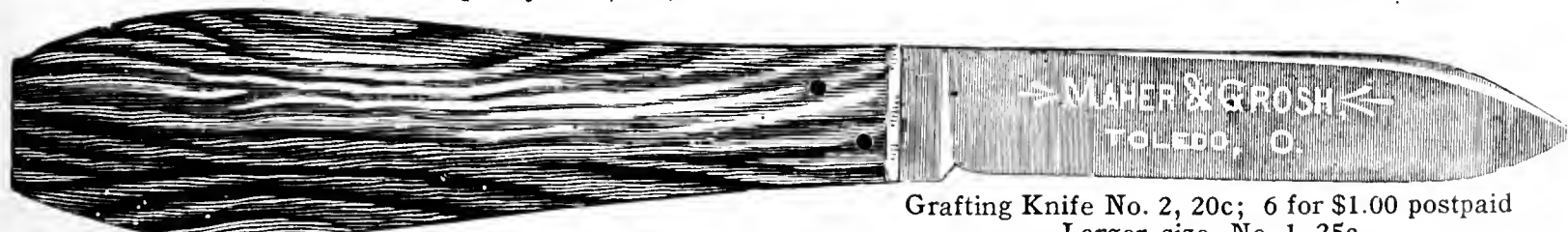
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Grape and Currant Cuttings and Light  
Grade of Vines for Lining Out  
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TREES, SHRUBS, EVERGREENS,  
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FOREST TREE SEEDLINGS we only have in limited supply  
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Send list of your requirements for lowest prices. Trade list  
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SPARTA, KY.

## J. H. SKINNER & CO.

Station "A," Topeka, Kansas.

Fruit, Shade and  
Ornamental Trees

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APPLE AND PEAR SEEDLING  
∴ FOREST TREE SEEDLING ∴

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**Grape Vines**

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IS NOW READY FOR MAILING. PRICE, \$3.00, PREPAID.

A complete alphabetical list of all American cities, with the names and addresses of all commercial horticulturists therein. A separate list, arranged alphabetically, of every commercial horticulturist in this country. These lists are keyed to indicate the special line or lines of each establishment. The book also contains special lists as follows:

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Horticultural Societies,\*  
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\*With new officers to date.

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It has been a worry to you to get the **RIGHT KIND** of material for packing your nursery stock.

How often are your shipments to far away points refused because the roots are dead or damaged when they reach your customer, leaving you express charges to pay, a lost sale, and if the first time the customer has bought of you, forcing him to make it the last time?

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Shingle Tow is Cypress shingle sawdust, differing from the usual sawdust in that it is sort of stringy.

Cooper and Rogers, Winfield, Kans., found moss expensive and straw not satisfactory, and a few years back started using our Shingle Tow. They say they use it for packing nursery stock, either for shipment or when carried through the winter in their storage cellars, and find the kind we furnish very satisfactory, because

**IT KEEPS THE ROOTS MOIST, EXCLUDES AIR, YET DOES NOT HEAT**

The Winfield Nursery Co., Winfield, Kans., say in substance the same, adding that *our* Shingle Tow does not contain as much loose waste matter as other tows. Also can refer you to many others it is pleasing.

We sell it in carloads only, loaded loose in car direct from saw as accumulated in manufacturing our shingles. Will be glad to quote delivered prices and mail you a liberal sample on request.

**BURTON-SWARTZ CYPRESS COMPANY**

BURTON, LA.

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NEW HAVEN, MO., Dec. 10, 1912

	$\frac{5}{8}$ up 4½ to 6 ft.	$\frac{1}{2}$ to $\frac{5}{8}$ 4 to 5 ft.	$\frac{3}{8}$ to $\frac{1}{2}$ 3 to 4 ft.	2 to 3 ft.
Alexander .....	1660	660	1500	1500
Belle of Georgia .....	1020	920	900	600
Carman .....	3500	5500	3160	4900
Capt. Ede .....	4100	5190	3560	4440
Champion .....	2970	1120	1120	4700
Chair's Choice .....	430	680	780	660
Crawford's Early .....	5000	4220	3520	2460
Crawford's Late .....	4580	3960	3160	3000
Chinese Cling .....	490	20	440	380
Emma .....	70	60	80	160
ELBERTA .....	35250	23640	22920	13060
Fitzgerald .....	1280	540	780	500
Foster .....	1070	1440	2160	1900
Greensboro .....	440	300	360	380
Gold Dust .....	330	600	1140	1480
Heath Cling .....	780	1460	3100	2320
Henryetta .....			80	120
Hiley .....	1380	1000	600	440
Matthew's Beauty .....	570	220	240	220
Mayflower .....	160		540	1912
Miller Cling .....	425	342	223	185
Mt. Rose .....	112		212	265
O. M. Free .....	195	265	165	115
Ringgold Cling .....	65	325	765	925
Salway .....	2512	541		883
Sneed .....	1254	562	862	685
Smock .....	365	222	245	345
Stump .....	131	245	423	612
Triumph .....	1845	985	685	582
Thurber .....	255	184	223	224
Wheatland .....	655	625	925	1125
Wonderful .....	312	282	315	412

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ESTABLISHED 1893

# THE NATIONAL NURSERYMAN

INCORPORATED 1902

## THE OFFICIAL ORGAN OF THE AMERICAN ASSOCIATION OF NURSERYMEN

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all the leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

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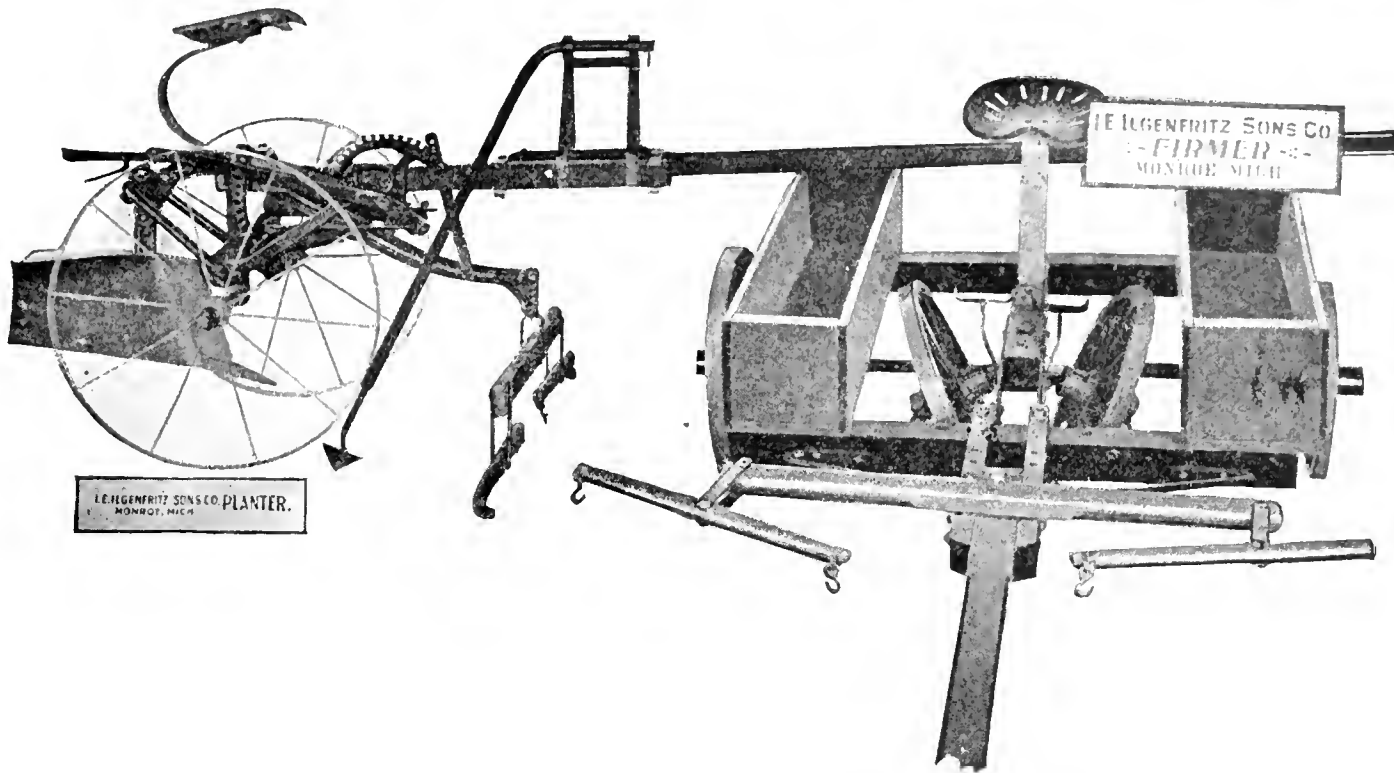
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Labor  
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Time  
Saving  
Devices  
for  
Nursery-  
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Better  
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of Stocks  
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at Less  
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Write for descriptive circular with testimonials from leading nurserymen of 17 states of the Union.

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**TAKE THIS MATTER UP AT ONCE.** Have machines for spring planting.

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(See our other ad. this paper)



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Established 1820

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**Especially prepared for Nursery and  
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Banner, 18 to 24 in.  
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Banner, 2½ to 3 ft.

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Bicolor, 3 to 3½ ft.  
Bicolor, 3 to 4 ft.

**Althea** Jeane d'Arc, 3 to 4 ft.  
Jeane d'Arc, 18 to 24 in.  
Jeane d'Arc, 5 ft.  
Jeane d'Arc, 2 to 3 ft.  
Jeane d'Arc, 4 to 5 ft.

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Meehani, 12 to 18 in.  
Meehani, 18 to 24 in.

**Althea** Pink, 18 to 24 in.  
Pink, 2 to 3 ft.  
Pink, 3 to 4 ft.

**Althea** Red, 18 to 24 in.  
Red, 3 to 4 ft.

**Althea** Violet, 12 to 18 in.  
Violet, 18 to 25 in.

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**Azalea** Mollis Named Sorts, 18 to 20 in.  
Mollis, Red, 18 to 20 in.  
Mollis, 6 to 8 in.

**Barberry** Thunbergii, 18 to 24 in.  
Thunbergii, 12 to 18 in.  
Thunbergii, 6 to 8 in.

**Crurnells**, 3 to 4 ft.  
**Crurnells**, 2 to 2½ ft.  
**Crurnells**, 3 ft.

**Deutzia** Crenata, 2½ to 3 ft.  
Crenata, 3 to 6 ft.  
Crenata, 4 to 5 ft.

**Deutzia** Gracilis, 12 to 18 in.

**Deutzia** Gracilis Rosea, 18 to 24 in.  
Gracilis Rosea, 2 to 3 ft.

**Deutzia** Lemoinii, 12 to 18 in.

**Deutzia** Pride of Rochester, 2½ to 3 ft.

**Euonymus** Japonica, 2 yr., 12 in.  
Radicans, 2 yr., 12 in.  
R. Variegata, 2 yr., 12 in.

**Forsythia** Golden Bell, 12 to 15 in.  
Golden Bell, 3 to 4 ft.

**Hydrangea** Panicleata Grandiflora,  
3 ft.  
Panicleata Grandiflora,  
12 to 18 in.

**Philadelphus** Single, 2 to 3 ft.  
Single, 4 to 5 ft.  
Single, 3 to 4 ft.

**Philadelphus** Double, 2 to 3 ft.  
Double, 4 to 5 ft.

**Privet** California, 18 to 24 in.  
California, 5 to 6 ft.  
California, 12 to 18 in.  
California, 2 to 3 in.

**Spirea** Anthony Waterer, 5 to 6 in.  
Anthony Waterer, 12 in.  
Anthony Waterer, 2 ft.

**Spirea** Prunifolia, 3 to 4 ft.  
Prunifolia, 12 to 15 in.  
Prunifolia, 3 to 3½ ft.  
Prunifolia, 3 to 4 ft.

**Spirea** Van Houttei, 10 to 12 in.  
Van Houttei, 3 to 4 ft.  
Van Houttei, 4 to 5 ft.  
Van Houttei, 12 to 18 in.

**Spirea** Forbelli, 2 ft.

**Viburnum** Opulus, 4 to 6 ft.  
Opulus, 3 to 4 ft.  
Opulus, 18 to 24 in.

**Viburnum** Plicatum, 5 to 6 ft.—Fine  
Plicatum, 12 to 18 in.

**Weigela** Candida, 2 to 3 ft.  
Candida, 5 to 6 ft.  
Eva Rathke, 4 ft. xxx  
Eva Rathke, 2½ to 3 ft.  
Eva Rathke, 2 to 2½ ft.  
Eva Rathke, 2 to 3 ft.  
Eva Rathke, 12 to 18 in.  
Eva Rathke, 18 to 24 in.  
Eva Rathke, 4 to 6 ft.  
Eva Rathke, 3 to 4 ft.  
Rosea, 18 to 24 in.  
Rosea, 3 to 4 ft.  
Rosea, 4 ft. xxx  
Variegata, 12 to 18 in.  
Variegata, 3 to 4 ft.

## CLIMBERS

**Honeysuckle** Heekrottii, 3 ft.  
Heekrottii, 8 to 12 in.

**Honeysuckle** Red-Coral, 3 ft.  
Red-Coral, 8 to 10 in.  
Red-Coral, 3 to 4 ft.

**Honeysuckle** Tatarica Yellow, 2½ to 3 ft.  
Honeysuckle Golden, 12 to 18 in.

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Universal Favorite, 3 yr.  
Violet Blue, 3 yr.  
Violet Blue, 1 yr.  
American Pillar, 1 yr.  
American Pillar, 2 yr.  
American Pillar, 3 yr.  
Dr. Van Fleet, 1 yr.  
Dr. Van Fleet, 2 yr.  
Miss Messman, 1 yr.  
Excelsa, 1 yr.  
Lady Gay, 1 yr.  
Hiawatha, 1 yr.  
Hiawatha, 2 yr.  
White Dorothy, 2 yr.  
White Dorothy, 1 yr.  
Gardenia, 1 yr.  
Dorothy Perkins, 1 yr.  
Flower Fairfield, 1 yr.  
White Rambler, 3 yr.  
No Light, 1 yr.  
No Light, 2 yr.  
No Light, 3 yr.  
Farquhar, 1 yr.  
Farquhar, 2 yr.  
Farquhar, 3 yr.  
Ruby Queen, 1 yr.  
Ruby Queen, 2 yr.  
Ruby Queen, 3 yr.  
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May Queen, 3 yr.  
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Evangeline, 2 yr.  
Evangeline, 3 yr.

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Sir Thomas Lipton, 3 to 4 ft.  
Rugosa Magnifica, 12 to 18 in.  
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Wholesale Growers and Exporters of  
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**STOCKS, etc., also**  
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**EVERGREENS, ORNAMENTAL SHRUBS,**  
**MANETTI, MULTIFLORE, and ROSES, also**  
**a full line of ORNAMENTAL STOCKS**

EXPORTS EXCEED 25,000,000 STOCKS ANNUALLY

For Wholesale Catalogue and Price List, address us or our  
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(ENGLISH GROWN)

**OVER HALF A MILLION  
TO SELECT FROM**

**APPLES:** Maidens, Bushes and Half-Standards are  
a leading feature with us. 250,000 in stock.

**PLUMS AND PEARS.** Enormous stock in lead-  
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**CHERRIES, Peaches, Nectarines and Apricots**  
in heavy quantities.

**Fruit Trees** are our leading line.

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Our nurseries are only ten miles by rail from London.  
List of varieties grown and quotations sent on  
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Fruit Tree Growers and Nurserymen  
**HOUNSLOW, ENGLAND**





# THE NATIONAL NURSERYMAN



FEBRUARY, 1913

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

## THE MONROE NURSERY

Established 1847.

OFFER A GENERAL LINE OF

### Choice Nursery Stock

## CHERRY and STD. PEAR

of Extra Fine Quality.

If you are in the market for superior trees write  
us for prices.

### I. E. Ilgenfritz' Sons Co.

MONROE, MICH.

## EVERGREENS

### OUR LEADING SPECIALTY

RHODODENDRONS, HEMLOCKS, WHITE  
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ALSO

NORWAY MAPLES, PIN OAKS, IBOTA  
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APPLE SEEDLINGS—Fine lot, healthy and free  
from disease. Special low prices until surplus  
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APPLE and PEAR GRAFTS—Made to order.

APPLE TREES—in car lots. Large assortment.

ORNAMENTAL TREES—in car lots. American  
Ash, American Elm, American Sycamore, Silver  
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Complete Line General Nursery Stock for Wholesale Trade.

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*Wholesale Nurserymen*

LAKE CITY, MINNESOTA

Established 1868

1500 Acres

Everything in the line of Nursery Stock  
suited to Northern culture.

*Let us figure with you*

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ROSES (all varieties) Tree Roses, Magnolias, Boxwood in Pyramids, Bushes, Standards, Ball Shape, etc. Koster Blue Spruce, Hardy Azaleas, Evergreens, Paeonies, Rhododendrons, etc., etc.

From the Nurseries of

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Norway Maples, (500,000 to select from in all sizes, whips to calipered trees) Schwedler Maples, Chestnuts, Tiliacs, Elms, Oaks, Thorns, Planes, etc. Straight stems, good roots, careful packing.

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that can be produced by suitable soil, climate and expert knowledge.

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AMERICANA PLUM ON PLUM  
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- 20000 Peach, in 2 to 3 ft., 3 to 4 ft. and 4 to 5 ft. sizes.
- 25000 Plum on Plum, Abundance, Burbank, Wickson, Red June, Gonzalez, and other leading sorts. Sizes  $\frac{1}{2}$ ,  $\frac{5}{8}$ ,  $\frac{3}{4}$  and 1 inch.
- 10000 Roses, Teas, Hybrid Teas and Climbers, all grafted very low on Manetti roots. Field grown.
- 6000 Biota Aurea Nana, sizes 18 inches up.
- 10000 Biotas and other Conifers, 12 inches and up. Conifers can be balled or shipped with naked roots.
- 25000 Chinese Arborvitae Seedlings, 2 and 3 year, 6 inch to 3 ft. sizes.
- 5000 Muscadine Grapes.
- 20000 Trellis Varieties Grapes.
- 70000 Camphor Trees, sizes 1 to 3 ft.
- 3000 Pot Grown Eucalyptus, sizes 3 to 5 ft.
- 4000 Oriental Plane, sizes from 4 to 12 feet.
- 3000 Texas Umbrella, sizes from 4 to 8 feet.
- 2000 Oleander. Field grown. 3 to 5 ft. sizes.

A general variety of Orange and Grape Fruit Trees.  
Could also supply limited quantities of general list of Fruit and Ornamental Trees to be used to fill in with orders.

*Stock is fine and will be sold at Right Prices.*

## The Griffing Brothers Company

JACKSONVILLE, FLORIDA

# NURSERYMEN AND FLORISTS

looking for stock can find largest assortment in the United States at the

## Painesville Nurseries

Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses,  
Vines and Plants, Grapes, Gooseberries, Small Fruits, Bulbs, Seeds,  
Palms and other tender Greenhouse Plants

Have large stock stored in frost-proof cellars that can be shipped at any time desired; switch from N. Y. C. lines direct into our packing house; can load without exposure. Unsurpassed facilities for handling orders large or small.

== CATALOGS AND PRICE LISTS FREE ==



AMERICAN CHESTNUT

### A FEW SPECIALS WHILE THEY LAST :

STANDARD PEARS in assortment, DUCHESSE DWARF PEARS, BOURGEAT QUINCE,  
PRUNUS PISSARDI and TRILOBA, CUTHBERT and other Raspberries,  
CONCORD and other GRAPES

### OUR SPECIALTIES ARE

Roses, H. P. Moss, Ramblers, Climbers, etc., Peaches, Pears, Plums, Cherries,  
Ornamental Trees and Shrubs in car lots, Weeping Mulberries, Elm and Ash,  
Clematis, Ampelopsis, Paeonies, Hydrangeas, Bush and Tree Perennial Plants.

No Trouble to Price your List of Wants. 59 Years 1200 Acres 44 Greenhouses

## THE STORRS & HARRISON CO.

PAINESVILLE, OHIO

PLANT FOR PROFIT

## Berberry Thunbergii Seedlings

\*\*\*

## California Privet

2 years, cut back, a fine lot

—and—

## A General Line of Nursery Stock

will be shown in our bulletins issued frequently from January on during shipping season, but remember, WE DO give you good thrifty stock, good grading, good packing.

\*\*\*

## C. R. BURR & Co.

MANCHESTER, CONN.

A good assortment of stock is offered in our January Bulletin, not a complete assortment, because we do not grow all kinds of stock; we can't. We grow only the things that we can produce in such quality and quantity as will make our specialties known to the trade for their superior excellence and reasonable price. Our friends say we grow ROSES, CLEMATIS, TREE HYDRANGEAS, TREE LILACS, and a few other specialties that are very good, and quite out of the ordinary. Stock very suitable in fact, for use in high-class retail orders. If you fail to receive a copy of our January Bulletin, let us know about it, and we will send another. You and we are losing something by your not having one. Drop us a line and let us tell you about our Spring stock.

## Jackson & Perkins Company

WHOLESALE ONLY

## NEWARK, NEW YORK

## SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY  
PEACH PLUM

A Fine Block of  
Own Root Roses

ORNAMENTAL TREES SHRUBS  
BERRIES CLEMATIS  
EVERGREENS PEONIES PHLOX  
PYRAMIDAL and STANDARD  
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists  
and carload lots.

## W. & T. SMITH COMPANY

GENEVA, N. Y.

63 Years

700 Acres

## Berckmans' Specimens

We never call a tree or plant a "specimen" until it really has earned the title. Our evergreens are transplanted, sheared and root-pruned, each one getting just the proper attention to make it a really handsome and serviceable specimen. It *costs* more to produce such, but it's *worth* it—to us, to you and to your customers.

### Your Trade Will Be Pleased With Them

We offer a select but limited stock at wholesale this year. We call attention to our Biotas—Aurea Nana, Aurea Conspicua, and Japonica Filiformis (see illustration); Retinospora, Thuya, and Juniper—all in popular sizes for the trade.

Our Deciduous Shrubs include Exochorda, Lilac, Spirea, Althaea, Deutzia, Philadelphus, and a very choice stock of Teas' Weeping Mulberry.

Broad-leaved Evergreens—Azalea Indica (Home-grown Plants) Magnolia Fuscata, Aucuba, Ligustrum, and English Laurel. Among our fruits, we direct particular attention to our clean, thrifty Peach Trees, of which we offer the the leading sorts.

### WRITE FOR PARTICULARS NOW

Tell us what you need, quantity, etc., and we will quote lowest price possible. Write early and get the best selections from our stock.

### P. J. Berckmans Co. INCORPORATED

### Fruitland Nurseries AUGUSTA, GEORGIA

Established 1856. Over 450 acres in  
Nursery.

CONIFERS  
BROAD-LEAVED  
EVERGREENS  
DECIDUOUS  
SHRUBS  
WEEPING  
MULBERRY  
PEACHES  
OTHER FRUITS



Biota Japonica Filiformis.



## The Best Tree Digger on Earth



Used and Recommended by Leading Nursermen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

**Stark Bros. Nursery & Orchards Co.**  
LOUISIANA, MO.



We wouldn't devote acres and acres to evergreens, growing them literally by the millions, unless we had a sale for them—and we couldn't keep on selling them year after year, in increasing quantities, if the trees themselves weren't the best our customers could get. We are selling

## Hill's Seedling Evergreens

to nurserymen all over the country who value their trade and want to hold it permanently. We are satisfying a critical trade here and abroad with them, and are increasing our sales every year. Is that what you want to do, too? Then let us send Wholesale Catalog and tell you more about our stock.

**THE D. HILL NURSERY CO., Inc.**

EVERGREEN SPECIALISTS

D. HILL, President

Box 401, Dundee,  
Illinois



**L. Spaeth** **BERLIN**  
Baumschulenweg  
GERMANY

## Largest Nurseries in Europe

2000 ACRES

FOUNDED 1720

## HARDY TREES AND SHRUBS

1. Our nurseries lie in a colder climate than the French, Dutch and English nurseries—
2. We grow all the stock we sell—
3. Moderate prices. Catalogs free—
4. When in Europe come and see our nurseries—

## Willis Nurseries

OFFER A GENERAL ASSORTMENT  
OF NURSERY STOCK

Apple, Peach, Cherry  
Kieffer Pear  
Red Dutch Currants  
Silver Maple Shade Trees  
Catalpa Speciosa Seedlings  
Apple Seedlings and  
Japan Pear Seedlings

**A. Willis & Co.**

OTTAWA, KANSAS

## Heikes -- Huntsville -- Trees



**Huntsville  
Wholesale Nurseries**  
**Huntsville, Ala.**  
**JESSIE S. MOSS, Prop.**

We offer for Spring of 1913  
in large quantities as usual:

### SPECIALTIES

**APPLES**—Commercial varieties, one and two year, in large supply. As fine in quality as ever grown.  
**PEARS**—Kieffers, one and two years old. A much smaller crop than heretofore.  
**CHERRIES**—On Mazzard. Two year, Bing, Lambert, Napoleon, Black Tartarian.  
**CHERRIES**—On Mahaleb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.  
**PEACHES**—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.  
**ROSES**—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.  
**PRIVET**—Amoor River (South). Retains its foliage longer and holds its color better than California Privet.  
**PECAN SEEDLINGS**—Huntsville grown from selected nuts collected along the Gulf Coast. Thin shell.

See Price List for Particulars.

Address, **HUNTSVILLE WHOLESALE NURSERIES**  
**HUNTSVILLE, ALA.**

## BOBBINK & ATKINS

**World's Choicest Nursery and Greenhouse Products**

**EVERGREENS and CONIFERS**,  
in several hundred  
kinds and varieties

**ROSES**, in all kinds  
and varieties

**RHODODENDRONS**, Hardy,  
**ENGLISH HYBRIDS**,  
Maximum and Catawbiense

**BOXWOOD**, in all shapes,  
forms and sizes

**HARDY AZALEAS**, in all  
colors and varieties

**HEDGE PLANTS**, in all  
popular kinds

**FLOWERING SHRUBS**, in  
bush and standard forms  
in hundreds of kinds  
and varieties

**SHADE TREES**, in hundreds  
of useful and attractive  
varieties

**MAGNOLIAS** and other  
**FLOWERING TREES**

**WEeping and STANDARD**  
**TREES**, in many varieties

**JAPANESE MAPLES**, in all  
varieties and colors

**HARDY TRAILING VINES**  
and **CLIMBERS**

**HARDY VINES and CLIMBERS**  
in pots

**SPRING and SUMMER**  
**FLOWERING BULBS, ROOTS**  
and **PLANTS**

**PALMS and BAY TREES** by  
the thousands

**FRUIT TREES**,  
home-grown, imported,  
**DWARF and TRAINED**

**SMALL FRUITS**, in all  
kinds and varieties

**NUT TREES**, profitable  
kinds

**OLD-FASHIONED**, Hardy  
**FLOWERING PLANTS**, in  
thousands of kinds and  
varieties

**PAEONIAS, IRIS, PHLOX**  
**FERNS**,  
and **HARDY GRASSES**

**KITCHEN**  
**HERBS and ROOTS**

**RUTHERFORD PARK LAWN**  
**GRASS SEED**

**AUTUMN BULBS**, Dutch,  
French and Japanese kinds

Interior and Exterior  
**DECORATIVE PLANTS**, in  
a large variety

**PLANT TUBS**, in all shapes and  
sizes. Ask for special list

**VISITORS** to our nurseries  
are always welcome

**SEND IN YOUR LISTS FOR**  
**QUOTATIONS**

**Nurserymen, Florists and Planters**  
**RUTHERFORD, N. J.**

## Fruit Seeds and Seedlings

**WE** offer a complete list of **FRUIT SEEDS AND SEEDLINGS** this year. Send for a copy of our list showing varieties, sizes and prices.

## Tree and Shrub Seeds

Send for our complete price list of **DECIDUOUS AND EVERGREEN TREE AND SHRUB SEEDS**. It contains a full list of varieties and prices.

## Small Stock for Lining Out

Our Price List of Small Stock for lining out in nursery rows will be ready about **JANUARY 1st**. This list will interest every Nurseryman. Be sure and get a copy.

**THOMAS MEEHAN & SONS**  
WHOLESALE NURSERYMEN AND SEEDSMEN  
**DRESHER, PA.**

## BRIDGEPORT NURSERIES

*OFFER A GENERAL ASSORTMENT  
OF NURSERY STOCK*

**Apple, Catalpa Speciosa Seedlings**  
**Shade and Ornamental Trees**

**IN LARGE QUANTITY**

WRITE FOR PRICES

**C. M. HOBBS & SONS**  
**BRIDGEPORT, IND.**

# Tree Protection

SCALINE will protect them all seasons of the year.

SCALINE is an oil and sulphur composition, a scalicide, insecticide and fungicide combined—three in one—and it will destroy San Jose, oyster shell, cottony maple, tulip scale, aphids, red spider, thrips, mealy bug and all sap sucking insects.

SCALINE is composed of a high grade petroleum oil and the properties of our fungicide Fungine, thus making it equally effective for the control of various fungi.

SCALINE is used at the strength of one part to twenty parts water for scale; one part to fifty parts for other sap sucking insects. It is readily soluble in water, requires no mixing, and containing no sediment can be applied through the finest spray nozzle.

SCALINE may be used as safely in the growing as in the dormant season. It is an all year round spraying material.

Gallon, \$1.50

Fifty gallons, \$37.50

Ten gallons, \$10

We believe that in SCALINE we have one of the best spraying materials on the market today for general spraying of trees, shrubs and hardy plants. We feel confident that a trial would make you a regular user of this product.

## Aphine Manufacturing Co.

M. C. EBEL, General Manager

Manufacturers of Agricultural Chemicals

MADISON, N. J.

"APHINE"  
Insecticide

"FUNGINE"  
Fungicide

"VERMINE"  
Vermicide

# FOREST TREES FRUIT STOCKS

Shipments of over 200 Millions of  
Trees annually

## Largest Forest Tree Nurseries in Europe

Please write for Catalogue and  
Forest Planter's Guide to our  
American Representative:

OTTO HEINECKEN

Whitehall Bldg.,

17 Battery Place

NEW YORK

## J. HEINS' SONS

HALSTENBEK No. 152

Near HAMBURG, GERMANY

## Oriental Planes All Sizes From 1 1/4 to 2 1/2 Inch Caliper

Double Flowering Peaches

Double Flowering Japan

Cherries, Weeping Japan

Cherries, Flowering Apples

Asparagus, strong 2 years

Large and complete assort-  
ment of Flowering Shrubs

## Hoopes, Bro. & Thomas Co.

MAPLE AVENUE NURSERIES

WEST CHESTER, PA.

PHILADELPHIA

OFFICE:

222-3-4-5 Stephen Girard Bldg.,

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Have you seen and examined the quality and  
finish of our

Rawhide Brand of Shipping  
Tags and Tree Labels  
printed or plain, strung or wired?



This stock is especially adapted to the most severe usage, being thoroughly waterproof & weather-proof. "Once used, always used."

Send for samples and prices. Our reference are the largest nursery men in the United States.

## The Denney Tag Co.

WEST CHESTER, PENNSYLVANIA

35TH YEAR  
**Pan Handle Nurseries**

WE OFFER A COMPLETE ASSORTMENT OF NURSERY STOCK CONSISTING OF

Apple	Poplar Carolina	Ampelopsis
Pear	Poplar Volga	Roses
Plum	Elm American	Evergreens
Cherry	Sycamores	California Privet
Peach	Mountain Ash	Buxus
Grape	Althea	Weeping Trees
Currant	Hydrangea	Catalpa Seedlings
Gooseberry	Barberries	Black Locust "
Small Fruits	Syringaeas	Fruit Tree "
Maple Norway	Clematis	Catalpa Speciosa Seed.
Maple Schwedlers	Honey Suckle	Etc., Etc., Etc.
Maple Silver	Wistaria	

Our stock is well grown and graded. Prices are such that it will pay to investigate. Come and see us or write.

**J. K. HENBY & SON**  
GREENFIELD, IND.

**Currants. Apple Trees  
Ornamental Trees  
Ornamental Shrubs**

No better stock or finer assortment in the country.

*Prices are right*

Our Spring Trade List can be had for the asking.

**ARTHUR BRYANT & SON**  
PRINCETON, ILLINOIS

**WOOD LABELS**

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

**Dayton Fruit Tree Label Co.**  
South Canal St., Dayton, Ohio

**Ornamental Trees, Shrubs,  
Evergreens, Vines, Etc.**

HIGH  
GRADE



LARGE  
VARIETY

Correspondence solicited. Price list upon request.

**W. B. WHITTIER & CO.**  
South Framingham, Mass.

WE OFFER FOR SPRING 1913:

**Norway Maple Silver Maple  
and Carolina Poplar**

IN CAR LOTS ALL SIZES  
GET OUR PRICES

**The Greenbrier Nursery Co., Inc.**  
GREENBRIER, TENNESSEE

**SCARFF'S PLANTS**  
equal to any  
on the market

Small Fruit Plants our specialty for 25 years. **100,000 Transplanted Raspberry,** Blackberry and Dewberry plants, fine for critical retail trade.

Currant, Gooseberries, Grapes, Horseradish, Asparagus, Rhubarb, etc. Hardwood cuttings and layers in large quantities. See our wholesale list before placing your order.

**W. N. SCARFF**

NEW CARLISLE, OHIO

**HORTICULTURE**

A Magazine of Trade News and Cultural Information for the NURSERYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

*Published Weekly*

SUBSCRIPTION \$1.00 PER YEAR

**HORTICULTURE PUBLISHING CO.**

11 HAMILTON PLACE, BOSTON, MASS.



**400,000 Small Fruit Plants** in storage for early spring trade, 1913. Blackberry root-cutting and sucker plants; Red, Purple and Black Raspberry; Downing Gooseberry, one year, No. 1; Dewberry; Asparagus two and three year roots; Rhubarb one, two and three year whole roots and divided. Trade List ready Feb. 1st. Let me quote you on your list of wants.

**P. D. BERRY, Dayton, Ohio**



# The CASHMAN Soil Firmer and Trencher

Greatest and Most Successful  
Labor-Saving Machines ever  
built for the Nurseryman.

Used by all Large  
Planters

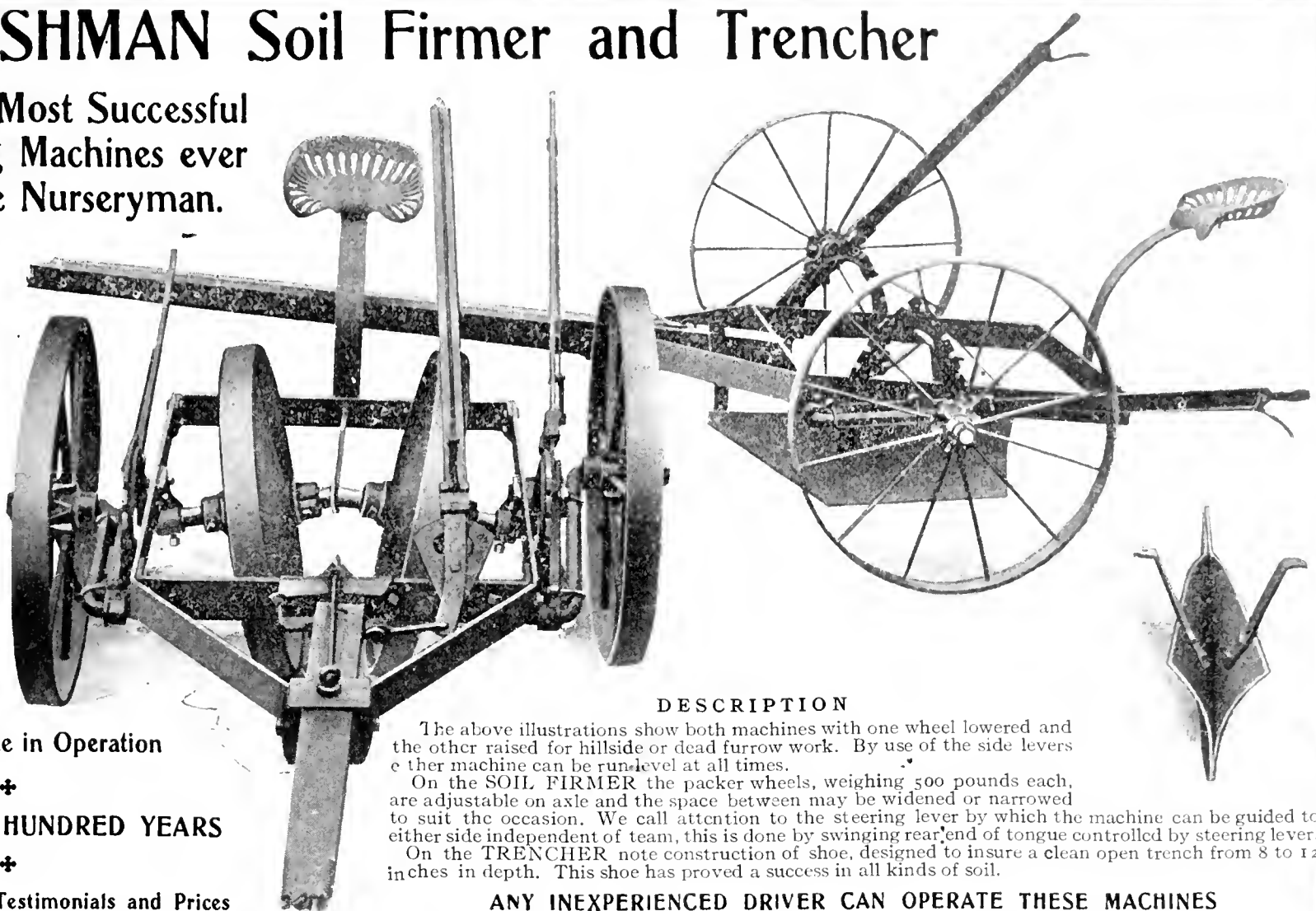
Built Entirely  
of Steel and  
Iron

Rigid and  
Substantial in  
Construction

Simple and Accurate in Operation

WILL LAST ONE HUNDRED YEARS

Write for Circulars, Testimonials and Prices



## DESCRIPTION

The above illustrations show both machines with one wheel lowered and the other raised for hillside or dead furrow work. By use of the side levers the machine can be run level at all times.

On the SOIL FIRMER the packer wheels, weighing 500 pounds each, are adjustable on axle and the space between may be widened or narrowed to suit the occasion. We call attention to the steering lever by which the machine can be guided to either side independent of team, this is done by swinging rear end of tongue controlled by steering lever.

On the TRENCHER note construction of shoe, designed to insure a clean open trench from 8 to 12 inches in depth. This shoe has proved a success in all kinds of soil.

ANY INEXPERIENCED DRIVER CAN OPERATE THESE MACHINES

MANUFACTURED BY **CLINTON FALLS NURSERY CO.** OWATONNA, MINN.

## Cyclopedia of American Horticulture

L. H. BAILEY

IN FOUR VOLUMES

The NATIONAL NURSERYMAN has made special arrangements with the publishers of this great work and now offers it to Nurserymen on *special easy monthly terms*, \$2.00 per month for ten months. The work shipped by express prepaid on receipt of first installment and coupon below filled out.

Practical instructions on every subject connected with Horticulture. Four handsome quarto volumes; 2,800 original engravings, 50 full plates; 2,016 pages and 4,357 articles; Total plants accounted for 24,434.

Fill out this coupon and mail with first payment:

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National Nurseryman,  
Rochester, N. Y.

Please enter my name as a subscriber for the new CYCLOPEDIA OF AMERICAN HORTICULTURE to be sent to me, charges prepaid, complete in four illustrated volumes, bound in green cloth. I inclose \$2 and agree to pay \$2 monthly for nine months after delivery until \$20 is paid.

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NOTE:—Send Money by Check or Post Office Money Order.

**THE NATIONAL NURSERYMAN**

218 Livingston Building

Rochester, N. Y.

## Franklin Davis Nursery Co.

BALTIMORE, MD.

### WE OFFER FOR SPRING 1913

APPLE—1 and 2 year.

PEACH—Will have a nice lot of smooth trees in good assortment of varieties.

CHERRY—1 and 2 year.

PEAR—1 and 2 year.

ASPARAGUS—1 and 2 year.

CALIFORNIA PRIVET—1, 2 and 3 year, or carload lots—fine, bushy plants.

ORIENTAL PLANES, CAROLINA POPLARS, NORWAY MAPLES, SILVER MAPLES.

AMERICAN ELMS and a general assortment of ornamental stock.

SEND IN A LIST OF YOUR WANTS

### WANTS.

We want small Evergreens and Shrubs for transplanting—What can you offer?

# DO YOU WANT THE BEST

## APPLE SEEDLINGS

Your money can buy? We can furnish them. We have been growing Apple Seedlings for twenty-eight years and think we know what it takes to make good Apple Seedlings. We find that one important part of the business is often overlooked. That is, to keep the foliage in a healthy condition. Seedlings with foliage damaged either by insects or fungus diseases cannot have a strong and vigorous root. Their vitality is weakened and they make poor budding or grafting stock. Our seedlings have been sprayed throughout the entire growing season and the foliage is in perfect condition, insuring perfect root development. Grading and sorting will be done by experienced workmen, under our personal supervision. Ask for sample of seedling. We shall be glad to send it by mail or prepaid express. Apple Seedlings are very reasonable in price this season. Why not grow a block of budded apple? A few scions placed in cold storage will give you cheap buds for next summer's work.

### WE OFFER APPLE SEEDLINGS IN THE FOLLOWING GRADES:

$\frac{1}{4}$  inch and all up, straight       $\frac{3}{16}$  inch and all up, straight       $\frac{3}{16}$  to  $\frac{1}{4}$  inch, straight  
No. 2, straight, strong grade      No. 3

APPLE—two years					APPLE—Continued					PEACH—Continued				
	$\frac{1}{8}$ " & up	$\frac{5}{8}$ — $\frac{1}{2}$ "	$\frac{1}{2}$ — $\frac{5}{8}$ "	3—4'										
Astrachan		40	60	75	Wine Sap	3280	2085	1700		O. M. Cling	223	173	246	25
Arkansas Black	420				Wolf River	285				O. M. Free	364	370	613	350
Aut. Strawberry			30	45	W. S. Paradise	110	66	35	25	Opulent	150	124	166	105
Ben Davis	1700	1930	1950	2030	W. W. Pearmain	160	165	150	69	Salway	408	570	520	540
Chen. Strawberry			50	43	Yellow Bell			35	21	Smock	150	250	270	116
C. E. White			20	20	Y. N. Pippin	890	417	500	50	Stump	330	440	656	610
Early Harvest	400		205	390	Yellow Transparent		330	870	430	Triumph	185	90	70	14
Gano	2600	1250	850	390	York Imperial	800	800	2000	300	Yellow Cling	225	383	475	280
G. G. Pippin	300	3100	2900	1260	Florence	240	100	180	90					
Hubbardston			95	95	General Grant	62		40	25					
Huntsman			90	68	Martha	100								
Ingram		140	400	243	Transcendent	500								
Janet	240		370	200	Whitney	140		140	75					
Jonathan	1500	2185	3000	1700										
M. Blush			110	150										
M. B. Twig	200		40	100										
Minkler	50													
Missouri Pippin	1200	155	88	100										
Northern Spy	580	240	320											
N. W. Greening	290													
Prices Sweet	380	185	168	93										
Rambo	550		50	16										
Ramsdell Sweet	213	158	80	25										
Red June	183		70											
Rome Beauty			500											
Stayman's Wine Sap	200	365	380											
Summer Rambo	45	40	50	32										
Sweet Bough														
Talman's Sweet	1196		300											
Wealthy			170											

### JAPAN PEAR SEEDLINGS

### CATALPA SPECIOSA

We gather our own Catalpa seed and know them to be genuine Speciosa. Plants are grown on upland and are all well ripened and stocky. FRENCH PEAR SEEDLING, HOME GROWN.

### GRAFTS

We are prepared to make Apple and Pear Grafts, whole or Piece Root.

APPLE TREES,      GOOSEBERRIES      CURRANTS  
PEACH TREES,      CHERRY TREES,      SHADE TREES      FLOWERING SHRUBS  
KIEFFER PEAR, 1 year      FOREST TREE SEEDLINGS

# J. H. SKINNER & CO.

NORTH TOPEKA, KANSAS

# The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

Vol. XXI.

ROCHESTER, N. Y., FEBRUARY, 1913

No. 2

## VALUABLE SUGGESTIONS FROM SOME OF THE LEADING LANDSCAPE ARCHITECTS

Gentlemen:

*For the purpose of publication in the NATIONAL NURSERYMAN will you kindly answer the following questions?*

*Are you always able to procure the proper kind of nursery stock to carry out your plans?*

*What kind of nursery stock do you have the most difficulty in procuring?*

*Do you prefer thick, bushy sheared evergreens or those grown more open and natural?*

*Are there any native plants that should receive more attention from the nurserymen?*

*What sizes of trees, shrubs or evergreens do you prefer?*

*You will readily see the object of the questions, and we should appreciate it if you would make any suggestions that would have a tendency to guide the nurserymen in the production of stock best suited to the needs of the landscape gardener.*

*Yours truly,*

EDITOR.

Answering your inquiries in your letter of January 9th, we beg to state as follows: Regarding the question, if we are always able to secure the proper kind of nursery stock to carry out our plans, we wish to say that while we are able to secure the general classified varieties, we have a great difficulty in securing a good many of the native varieties for treating certain grounds where the native varieties would be most desirable to give the desired character to a certain treatment, especially wooded lands. It seems that while the nurseries throughout the country devote their time and energy to grow the generally cultivated stock among a good many imported varieties, they do not cultivate a sufficient number of native varieties, especially among the native shrubs and wild flowers.

Regarding the question what kind of nursery stock we have the most difficulty in procuring, we wish to state that the greatest difficulty we have is procuring native Cedars among the evergreen trees, native roses, Canadian Juneberry, Wild Cherry, Buffalo Berry among the shrubs and various native wild flowers.

Regarding the question if we prefer thick bushy sheared evergreens or those grown more open, we wish to state that we prefer those more open, as they give the desired natural effect.

Regarding the question if there are any native plants that should receive more attention from the nurserymen, we wish to state that there are numerous native plants throughout the country which would be planted largely if they were on the market, especially throughout the north-western part of the country and Western Canada, where owing to hardy climatic conditions the native plants are more desired.

Regarding the question of the size of trees, shrubs or evergreens we prefer, we wish to state that while in many cases medium sizes are most favorable, in a number of cases larger sizes among the trees, shrubs and especially evergreens are, desired, such as large sized Cedars, Pyramidal Arborvitae, Globe Arborvitae, White Spruce, Concolor Fir, Balsam Fir and White Pine.

The NATIONAL NURSERYMAN will surely render a great service to the profession of landscape architecture, to the nurserymen themselves and the country at large by guiding the nurserymen in the growing of stock best suited to the various parts of the country, by growing the stock well and packing same well so that after its arrival, especially after being on the road for a long time, it would give the best satisfaction. It is recognized by the landscape profession that well grown stock should command good prices and as the demand for well grown stock is larger every year, the nurserymen should recognize this new demand and bend their energy to furnish the country with the best product of their labor. It will also be well to enlighten the nurserymen that it will be to their advantage if they would grow less varieties but larger quantities of those varieties which are hardy in the larger part of the country, and for which variety there is a large demand.

Trusting that this may be of some assistance in your good work, we beg to remain,

Yours very truly,

MORELL & NICHOLS.

We beg to acknowledge the receipt of your letter of January 9th with list of questions which we answer herewith.

I. We are not always able to procure the proper kind of nursery stock for carrying out our plans but this occurs only when we are anxious to use some particular kind of plant in a certain size.

II. We do not have difficulty in obtaining any kind of nursery stock excepting a few rare things of which there is never a large quantity.

III. In the use of evergreens we occasionally use sheared specimens when the formality of the design in our opinion calls for the sheared plant. In all other cases we prefer evergreens of the natural shape. However, certain evergreens, such as the Hemlock, will always transplant better if they have been sheared each time they were transplanted in the nursery. This is a question of proper management on the part of the nursery.

IV. In regard to the use of native plants, we find that certain nurseries always carry a good supply of our best native plants.

V. In regard to the size of trees, shrubs, etc., we have no preference. The size all depends upon how much the appropriation is and what the market will offer, also the size that transplants best.

For the guidance of the nurserymen we would suggest as a most important matter that stock should be transplanted frequently in the nursery to produce a thick growth of fibrous roots in order that the stock may endure transplanting and shipping with success.

Very truly yours,  
OLMSTED BROTHERS.

In answer to your letter of January 9th, we are pleased to make the following statements:

We in general find no difficulty in procuring the proper kind of nursery stock to carry out our plans. It is seldom that we are obliged to make any important change in a plan made in our office owing to difficulty in getting the stock called for.

Our tendency is to get immediate effect as far as possible and so we prefer mature-looking stock.

For evergreens we like to get the thick, sheared specimens rather than the loose-grown sorts because we find they grow better.

As a rule we are not able to purchase very large evergreen stock, owing to the expense, and since we must look into the future for the effect these plants will produce, we naturally choose the kinds that will grow most rapidly and be surest to succeed, and we think this is the case with the sheared specimens.

Of late we have had some difficulty in getting good varieties of rhododendrons, and one kind of plant which is most apt to be sold out is the native *Azalea*. We can almost always get *calendulacea* somewhere, though not always in good size and it is getting very expensive as are all the *Azaleas*, but *Vaseyi* and *arborescens* seem to be scarce in the market.

We have no particular preference in the kind of shrubs or in the sizes; so much depends upon the individual client, but as I say, our tendency is to plant for immediate effect, and so where the client is willing to spend the money, we get large sizes, particularly in trees and evergreens.

Our suggestion to nurserymen, based on our own experience, is that their stock would be very much augmented in usefulness if it included better specimens of such plants

as Lilac, Bush Honeysuckle and Mock Orange, which may frequently be used with propriety for positions flanking doorways or gateways in simple designs where evergreens are not suitable. There is a very small amount of trimmed privet on the market. Shrubs of this sort are tremendously useful. In making a planting around a house if one could use only a limited number of large specimens, he would give the design a character at the beginning which would be impossible without them, and it would also make it less necessary to put in deciduous shrubs at very close spacing for the first planting for the sake of getting the ground covered.

Yours very truly,  
HENRY P. WHITE,  
Pray, Hubbard & White.

Replying to your letter of January 9th, would advise that I have had difficulty in getting all variety of plants in one order from the same nurseryman.

I prefer the open and natural grown evergreens.

Among the native plants that should receive more attention from the nurserymen are the White and Red Cedar and Hickory.

I prefer to plant small stock.

Yours truly,  
(Signed) LORING UNDERWOOD.

Replying to your letter of January 9th I have often had some difficulty in obtaining evenly matched young avenue trees in the ten to fourteen foot sizes which have been properly grown with enough free space around them. Especially is this scarcity noticeable in the case of Sugar Maples.

I prefer evergreens thick and bushy and sheared.

Among the native plants I find that do not receive attention from many nurseries are, the Common Red Cedar (*Juniper*) and the White Dogwood. It has also been hard lately to obtain matched Hemlock in quantities in the three to six foot sizes at reasonable figures.

I use largely trees in the ten to fourteen foot sizes of strong caliper, shrubs in the two to five foot sizes and evergreens in the four to five foot sizes.

Yours very truly,  
CHARLES W. LEAVITT, JR.

William Walker of Honeoye Falls, N. Y., attended the Fruit Growers' Convention at Rochester and took the occasion to pay us a visit and tell us that the NATIONAL NURSERYMAN was beginning to really represent the nurserymen.

Another caller was J. J. Norton of J. J. Norton & Son, Dansville, N. Y., with words of praise.

We begin to feel the NATIONAL NURSERYMAN is getting on the right track.

Mr. C. R. Burr, of the firm of C. R. Burr & Co., Manchester, Conn., called at the NATIONAL NURSERYMAN's offices, and incidentally explained in person why he and Mr. Thomas B. Meehan could not speak above a whisper for a week after their visit to New York.



# CATERING TO THE LANDSCAPE ARCHITECTS

By S. NEWMAN BAXTER

To successfully solicit the business of the professional landscape architects requires first of all a knowledge of their wants. As their orders differ in many respects from those of the average retail customer a discussion of the difference will assist the nurseryman in catering to this large and constantly increasing class of buyers.

Quality probably exceeds all other requirements. Upon the quality of the plants depend in no small measure the success of the planting—the scheme—the architect's efforts. Price is not questioned. Results are paramount and if you care to grow stock a little better than the other fellow you stand a good chance of getting the order at a much better price.

Next to quality you must have a desirable assortment of plants both as to varieties and sizes. Unlike most retail customers the landscape architect is not carried away by a flower only. The plant must possess other merits—foliage and fruit—and they are usually well weighed before allowed to enter into the planting scheme. In this respect may be mentioned a preference for natives or wild plants, a class held in small esteem by the retail trade. Native roses, *Viburnums*, *Cornus*, Spice Bush, *Rhus*, Bush Honeysuckles, Regal Privet and Hawthorns are preferred to *Hydrangea p. g.* or similar "showy" plants. Trees of natural habits are preferred to weeping, variegated or freaky forms, whereas the latter would prove the best sellers, especially with a little advertising, among the retail trade. White flowers are preferred to all colors. The architect and retail customers meet on common ground in the demand for such good old standbys as Lilacs, Mock Oranges, *Deutzias*, Golden Bell, *Spiraea Van Houttei* and Japanese Barberry.

The subject of size is worth considering. We all know that small plants take hold with less risk and grow into good specimens more quickly but there is the everlasting desire for immediate effect and when the client wishes it and the architect desires to make a showing it is folly to use the "just as good" argument on behalf of your small stock while the other fellow gets the order for his big bushy specimens. Knowing this, nurserymen now grow trees further apart to develop good heads; transplant and root prune to form a good root system that will minimize the risk attending the moving of big trees. Shrubs, too, are grown singly instead of close in rows. It costs more to grow stock this way, of course, but do not forget that *results* are first, last and for all time. This sort of stock is in a class by itself and the architects know the reason for its superiority over the ordinary sort.

Possibly the next point that appeals to the architect is quantity. He specifies one hundred shrubs where the retail customer buys five. He likes to place the complete order with one nursery. If you would cater to his wishes, therefore, omit the five and ten of an assortment and grow hundreds and thousands. This, of course, is impossible for the small nurserymen but nevertheless his patronage demands it. Ascertain what he likes and grow it for him. If he knows plants you will win him this way and lose him if you try to substitute or improve upon his selection. This

of course refers to the professional men whom you know are familiar with plants and whose very reputations suggest your making a study of and catering to their needs. The "landscape gardener" who does "white washing" "puts out ashes" and "attends to lawns" is not considered here. Be wary of the gardener who orders shrubs of sizes equal to if not exceeding their growth at maturity, like *Deutzia gracilis* three to four feet or who continually specifies quantities of a plant of which there are few if any offered commercially. However, do not let his unfamiliarity with plants and the market deter you from trying to please him. It's business you are after and the architects with the large clientele are the ones to whom you should look for the best orders.

In short, therefore, the professional landscape architects demand quality, desirable varieties—especially of native or so-called "wild" stock and by no means a good seller with the retail trade—large sizes and liberal quantities.



## Fruit and Plant Notes.

### A NEW PEAR IN THE NORTHWEST

Ira B. Sturges of the Baker Floral & Seed Co., Baker, Oregon, writes:

The American Pomological Society have but recently named my new seedling pear, "Sturges" which Professor C. I. Lewis of the Oregon Agricultural College pronounces the finest seedling pear that has been submitted to him in Oregon. It is now being tested out by several of the experiment stations throughout the United States and Canada. It is too early to tell what its merits are in different sections of the country, but if it does as well in most sections as it has shown here, I believe it will become one of our leading varieties, if not the leading one.

When it is ripe it is of great beauty, highly colored, ripens from thirty to forty-five days after being picked in ordinary cellar. It is most productive, the tree being only six years old this spring; blossomed at three and four years from seed; at five years old it bore 87 pears, and at six years, 136 pears, weighing 45 $\frac{3}{4}$  pounds after being thinned from five to seven when as large as hazelnuts to one and two, then being further thinned by a hail storm on July 22d, which stripped the entire foliage from off the tree and a good proportion of the fruit that had been left after the first thinning. It also shows evidence of being blight proof, as the tree stands surrounded by other varieties that have all been killed this summer by the blight, the first season it has ever made its appearance in this section, but this seedling has shown no evidence of it. It is a fine eating pear, having a flavor peculiarly its own, and very different from any other varieties; it has also good stewing qualities, and believe it will make a fine fruit for canning purposes. I have asked for a Wilder medal on this pear, but it may be several years before the committee can pass on it intelligently, or until it is seen how it stands in the various sections of the United States.

# TOP WORKING TREES IN THE NURSERY

E. A. SMITH, Vice-Pres., The Jewell Nursery Co., Lake City, Minn.

## PLANTING THE SEEDS

We plant the apple seeds and at the end of one year dig the roots, then sort them and transplant those suitable in the spring of the following year. These we grow one year, at the close of which there will be a top varying in length from one to three feet, and in caliper from one-fourth to three-eighths of an inch. The seedling root now has a two years' growth and a one year top. The following spring we cut off this top somewhat close to the ground, then select a scion of such variety as we wish to propagate about the same size as the apple seedling. The root is cut slanting and the scion about the same slant so that they will fit closely, using the whip grafting method. We then wind soft grafting wax about the root and scion at the point of union so as to hold the scion firmly in place.

## PREPARING THE GRAFTING WAX

The wax is prepared in the following manner: 1 pound bees-wax, 1 pound tallow, 6 pounds resin. Put in a kettle, melt and thoroughly mix. Then take out in chunks about as large as a man's fist and cool. The wax can then be laid aside for an indefinite period. When it is used for grafting it must be heated. We use a small stove especially prepared for this purpose in the field. We set a pail of water on it to be heated, and put the grafting wax in this water to be softened. A man then puts grease upon his hands so that he can handle the wax without its sticking. We prefer wax to either paper or cloth as it yields more readily to the growth of the tree, expanding and yet always fitting the growth so closely as to be air-tight, thus insuring a perfect union.

Soon after the wax is wound about the scion and root it becomes cool and the wax is then very firm and becomes quite hard so that it will not readily dent with the finger nail, but in the warm rays of the sun the wax quickly softens and becomes smooth on the outside, almost as though it had been polished. This helps in the shedding of rainfall so that the water which runs down the scion, as soon as it strikes the wax quickly runs over the surface and away from the point of grafting. The work must be done in the spring as early as possible.

## RESULTS

Where the union takes place an enlarged growth quite often occurs which is frequently so rough and large in appearance it is sometimes mistaken for crown gall, but as the tree becomes older, this enlargement disappears, the tree growth building up around it. The wax sticks tightly to the tree and frequently remains upon it either in a broken or crumbling condition for several years. In fact, we have seen traces of wax upon a tree five years after it was planted. It does no harm whatever to the tree, but where this method

of propagation is not fully understood, parties have sometimes taken the liberty of calling these trees unsound, in some instances even claiming that the wax was put on the trees to cover a defect or gall which might appear. Even nurserymen not familiar with this

method of propagation have been led to wonder at it and what it meant, but the method is all right. To convince yourself of this fact you have only to give it a trial. In southern countries it would not be a success for the reason that the extreme heat would melt the wax and it would run away from the point of union, but as far north as Minnesota there is very little danger of this occurring.

## ADVANTAGES

Now what is the advantage of using this method of grafting in the nursery field? Under normal conditions a five to six or four to five foot tree, branched, can be grown in two years, while with the piece root system it often takes from three to four years to produce a good five to six foot tree.

## COST

The first cost is greater than in piece root grafting, but this is made up in the time saved in producing a tree ready for market. Two men with the assistance of a boy who handles the wax can top-graft in the nursery, 1200 to 1400 trees in a day. Trees grown in this manner are healthy, vigorous, desirable and much sought after by those favoring the whole root method of propagation.

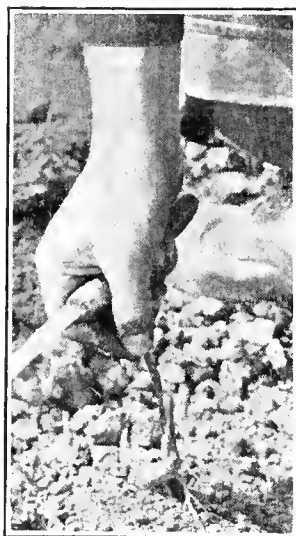


FIG. 2

Fig. 2—Second step in the process of top working in the field. Placing the scion in position preparatory to winding with wax. Scion and root at point of union prepared the same as in piece root grafting.



FIG. 1

Fig. 1—First step in the process of top working in the field. Cutting off the top of the seedling upon which is to be grafted the variety desired. Root of seedling two years old; top one year old.



FIG. 3

Fig. 3—Third step in the process of top working in the field. Winding a heavy coating of wax about the scion and root to hold it firmly in place so that it will form a perfect union.

Budding with us has not proven a marked success, but this method of field top-grafting has. We grow about fifty thousand apple trees in this way each year and over one hundred and fifty thousand plum and Compass cherry trees. We should grow more of our apple trees in the manner above described, but we do not have the time, men or facilities for doing the work properly in the comparatively short season when the work must be done to insure success.

### MORE ABOUT COST OF PRODUCTION

In answer to the questions propounded in your letter of December 9th, we will say:

(1) We have been trying to evolve a method of determining cost of production. Our efforts have been extended over the past ten years in this direction, and we think we are getting somewhere near a solution, though we do not consider that it is perfect yet.

(2) As a general principle we believe a nursery should be conducted so that all expenses of whatsoever nature are in the final annual analysis divided up and put as a burden upon the nursery stock accounts. There are always a lot of overhead expenses, which you cannot during the year divide up against the nursery stock accounts, and yet the nursery stock accounts are in their sum total the real revenue producing part of the business. It is our theory, therefore, that after having followed up the nursery stock accounts during the year and charged them with all the expenses that can be directly charged, then in closing the books all the rest of the loss side of LOSS AND GAIN should be in some manner divided on to the said nursery stock accounts. How to do that is, of course, a question. It has to be more or less arbitrary. Such things as rent, taxes, insurance, heat, light, depreciation, etc. do not have any more direct bearing upon your apple account than they do upon your ornamental shrub account. Therefore, we consider a pro rata division of all this "overhead" expense about as equitable a division as can be made. Now at the end of the season you have down a figure representing the total cost of production in each of the separate propagation accounts. If you also are careful in getting figures to cover the net production of each account, it is then a simple matter to arrive at the cost per tree. Of course, as to relative value of the different sizes produced, there would be considerable difference of opinion, so every nurseryman might have a different way of dividing it.

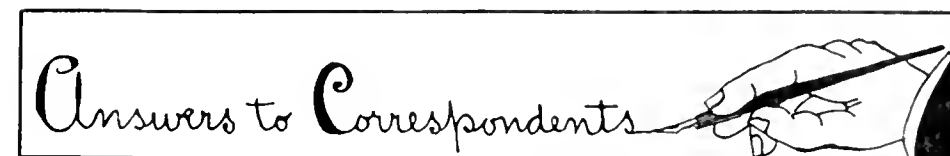
We have not gone into details of this system, but think that the broad outline given will, perhaps, be suggestive to some nurseryman who is beginning as we did to try and accomplish what we well understand many other nurserymen declare to be impossible, namely the arrival of the cost of producing a tree.

(3) Certainly. The sooner all wholesale nurserymen can realize that selling below cost is absolutely "worthless business", they will, if they do know the cost, stop that practice. We think the trouble is that most of us do not know what the cost may be.

Another thing about a system of cost figures. It is unsafe to take any one year's figures as an arbitrary basis.

Our idea is that you must take the figures of three years, or preferably five.

(4) We will admit that the other man's catalog price is apt to influence us, but we believe the policy should be to stop propagation rather than get down to the other man's price, if you cannot grow that particular item at a profit.



Will you please and advise me by return mail if ground-up-leather is a fertilizer, as there are car loads of it ground up and mixed in with other fertilizers and sold for such.

J. L.

The following answer was obtained from the Pennsylvania State College.

While ground leather contains rather large quantities of nitrogen but is present in a very unavailable form and in the raw state is looked upon as an adulterant in a commercial fertilizer. After such material has been treated with sulphuric acid in process of wet mixing, however, the nitrogen that it contains becomes much more available. It would not be possible for a farmer to give it that treatment.

### HARDY GRAPES FOR THE NORTHWEST

Wm. Pfaender, Jr., of New Ulm, Minn., writes: It may be of interest to many of your readers to know that we now have grapes in Minnesota, that can be successfully grown without winter protection. The standard varieties, such as Concord, Moore's Early and others can be grown in Minnesota, but a fair crop can only be expected if they are well protected during winter. Since several years, however, we have a quartette of grapes all of the same parentage—being a cross of our native white grape (*Vitis Vulpina*) and the Concord—that are perfectly hardy in our severe winters where the thermometer often drops to 20 and 30 degrees below zero.

The wild white grape used as a foundation was very sweet, a late bloomer and matured its fruit very early, which is also true of the cross above mentioned. The vines drop their foliage early and ripen up the wood perfectly, are vigorous growers, and annual bearers of a good sized bunch and berries nearly as large as those of the Concord. They produce a red wine of superior quality. I am certain that these grapes can be successfully grown much farther north than southern Minnesota. They are now being tested near Winnipeg, Manitoba.

### SUN-POWER ENGINE

An interesting report concerning irrigation by sun power is made by the British consul at Alexandria, who comments on the arrival from Philadelphia of the Shuman sun-heat absorber, which, he says, was tested and found to be satisfactory. The plant is being erected at Meadi, near Cairo, and will be used to pump water from the Nile to irrigate the surrounding land. Several improvements have been added to reduce the cost of working. In Egypt both coal and other kinds of fuel are expensive, says the consul, but plenty of sunshine can be relied upon at all times of the year, so that the experiments with this practical sun-power plant will be of much interest to agricultural enterprise.—From *Daily Consular Trade Report* No. 220.



NURSEY MEN

**Business Movements.****HARRISON NURSERY COMPANY, YORK, NEBRASKA**

Information has just come to hand that the above Company has just completed a new packing and storage house. It is 100 x 120 feet, 22 feet to ceiling, with a 2 foot pitch to the sides, constructed of brick and tile, the walls and roof containing double air chambers with a perfect system of

ventilation. Being so well built it is not expected that heat will be necessary to keep out the frost. It is equipped with hoist and trolley system for handling heavy boxes.

Judging from their very attractive catalogue, the Harrison Nur-

seary Company has a well equipped plant and a good line of stock. They are to be congratulated on the growth of their business.

It is in such localities as the treeless plains of Nebraska that the value of nursery business to the country is most in evidence.

Twenty-five years ago when the Harrison Brothers started their business, they were true pioneers. Nearly every tree or shrub they planted must have been more or less new to the country; there were no established nurseries to draw on for experience, but they stuck and succeeded, and we hope they will continue their good work for many years to come.

**PEYTON & BARNES DISSOLVE**

The nursery firm of Peyton & Barnes at Boonville, Mo., has been dissolved by mutual agreement. Mr. Barnes buys the old firm name Boonville Nurseries. Mr. Peyton buys three-fourths of the growing nursery stock and nearly all of the propagating equipment, and will do an extensive nursery business under the new firm name "Peyton Nurseries." The ownership being T. R. Peyton & Sons.

Enclosed please find P. O. value \$1 for renewal of our subscription. We appreciate the NATIONAL NURSERYMAN very much.

Yours faithfully,

CAMPBELL & McCALL.

**CIRCULAR LETTER ADDRESSED TO NEW YORK NURSERYMEN**

GEORGE G. ATWOOD, Chief Bureau of Horticulture and Nursery Inspection, State of New York, Department of Agriculture, Albany

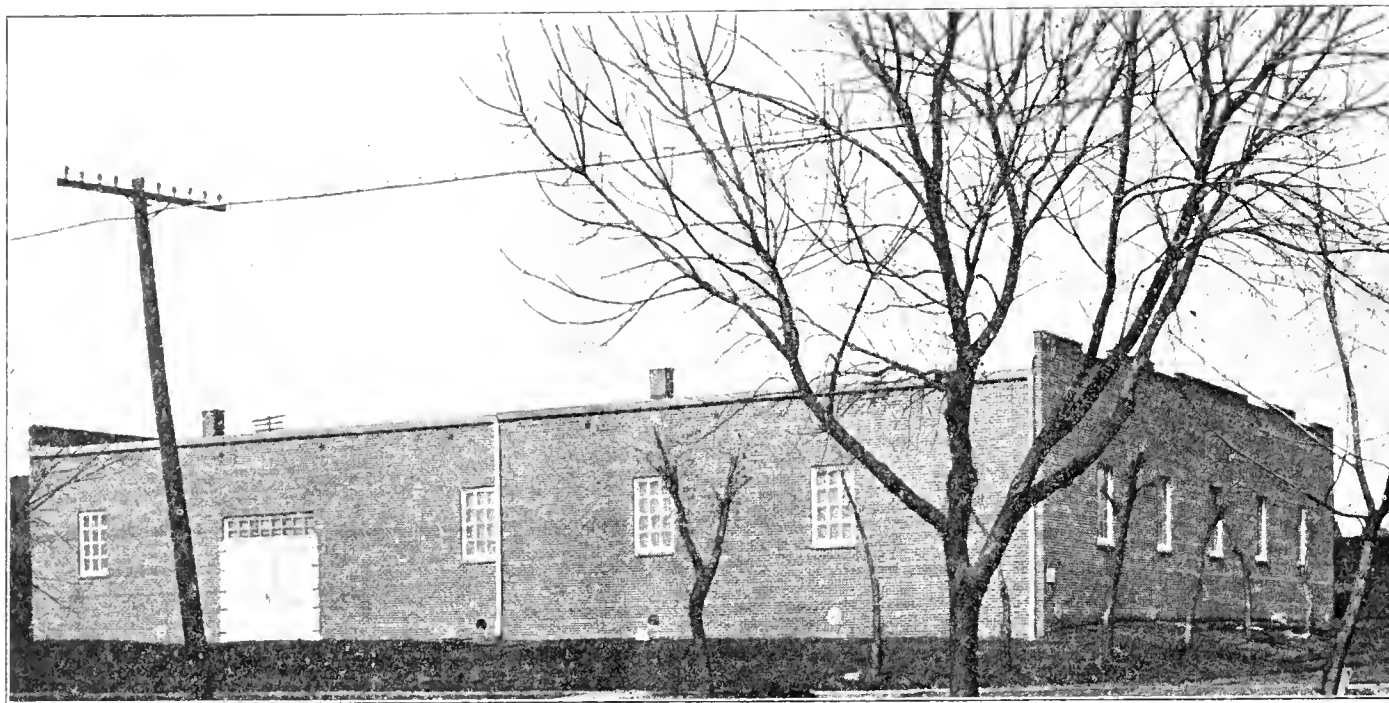
January 1, 1913.

Dear Sir:

As it is not practicable to get all of the nurserymen of the State together at once at one place I take this means of addressing you.

There are several matters of importance to which I invite

your attention in the paragraphs following. I shall be pleased to have a letter from you in response to this communication and ask your co-operation to the end that the trade shall have all the assistance that the department of agriculture



New Packing and Storage House, Harrison Nursery Co., York, Neb.

can properly render and that our certificates of inspection shall never be questioned. It is our desire to enlarge and improve our inspection service.

**REQUIREMENT**

1. Persons bringing nursery stock into the state are required by law to notify the commissioner of agriculture of the fact and also to hold all shipments unopened and undisturbed until authorized to do so.

**SAN JOSE SCALE**

2. Nurserymen should be very much more particular than some of them have been in the choice of locations for planting. No plantings should be made adjacent to old hedge rows or other trees known to be infested by San Jose Scale.

**FUMIGATION**

3. Nurserymen must give more attention to scions and bud sticks to be sure they are free from scale. It is recommended that scions and bud sticks from whatever source be both carefully inspected and fumigated. This course is necessary to prevent a wide and general distribution of scale throughout the blocks.

**ROOT GALLS**

4. Nurserymen must give more attention at digging time to the discard of trees and plants that have galls on the

roots. It is immaterial whether the knots are caused by aphids or otherwise. Galled roots are generally not merchantable and further they must be rejected by the rules of the Association of Official Horticultural Inspectors of the United States. Galled roots cannot all be detected by inspectors on growing nursery stock, therefore, the nurserymen must reject them when dug.

#### BLISTER RUST

5. Recent investigations indicate the necessity for radical control of the white pine blister rust (see Horticultural Bulletin No. 2). All persons are advised not to grow or bring into the state any plants of black currants. No currants of any kind should be grown within 300 yards of the five leaf pines and if so growing they should be separated as soon as possible.

#### POSTAL REGULATIONS

6. The regulations of the Postmaster-General to the effect that no nursery stock can be sent through the mails unless accompanied by a certificate of inspection are so general as to include bulbs, roots and florists' products. The latter items have not been regarded as nursery stock under Section 305 of the Agricultural Law. It may be necessary to have our inspection law amended to give authority for inspection and certification of the large amount of this kind of matter sent by mail by florists, seedsmen, and others.

#### POTATO WART DISEASE

7. As nurserymen are at times potato growers we ask that they notify us of cases where imported potatoes have been used for planting. Attention is called to our Bulletin No. 41 on the European Potato Wart Disease.

#### CHESTNUT BARK DISEASES

8. It is strongly advised that no chestnut (*Castanea*) trees or plants be purchased or brought into uninfested areas of the state from any point where the chestnut bark disease is established.

#### CONCLUSION

I deem some of the above subjects of so much importance to the nursery business that I ask if our regulations should be modified or made more strict and we shall be glad of your suggestions for the improvement of our service.

#### THE STUDY OF BOTANY

Although this is my first attempt to accomplish any literary task, I am consoled by the anticipation of being duly pardoned for these unpolished lines, which are no doubt deficient of eloquence and probably inefficient from a grammatical point of view, on the grounds of inexperience. However, the subject. It is not my intention to take upon my shoulders the responsibilities of a tutor, but simply to advocate what at present I consider a desirable study for gardeners. Botany should, in my opinion, be studied by young gardeners who have aspirations to succeed, and as there are few who do not possess some ambition, this practically applies to all. I am sorry to say that during my own short experience I have met with comparatively few who

have any notion whatever of the classification of plants, and I venture to say some confess total ignorance regarding the knowledge of the essential parts of a plant, i.e., the andræcium (stamens) and the gynæcium (pistil), but simply distinguish plants one from the other by the characters which are obvious.

Doubtless many intelligent young gardeners maintain that it does not constitute any part of their profession, and strengthen their argument by the fact that many head gardeners of to-day are unacquainted with it; but apart from this, and looking at it from a "pastime" point of view, one could not wish for a more instructive and interesting study, besides incurring little expense. Even an elementary knowledge of the subject may lead one to spend many happy hours indoors in winter, and be a source of increasing pleasure and interest during summer rambles, when instead of heedlessly trampling down "Nature's angels," you will feel the greatest anxiety for their safety. It is generally admitted that scientific gardening is becoming more prevalent each year, and whatever the gardening of the past may have been, I am firmly convinced that the men of the future must be proficient in a combination of both theory and practice. Although a man may be a skilful gardener without possessing any knowledge of botany, we must bear in mind that education advances with the times. When had we better opportunities of improvement than the present day? Sometimes I think of the botany classes of our education centres, and then wonder at the feeble response gardeners give to such an encouragement. Botany is progressing rapidly, and those who will devote time to the study will notice how the interchange of ideas which faculty of intercourse with it gives, is surely tending to raise the standard of a gardener's intelligence, and therefore render him more fitted for the higher duties when he is called upon in later life to perform such.

However much practice is commended, horticultural knowledge will remain in its infancy if gardeners possess no higher attainments than merely being able to name plants and do not study the principles upon which the success of practice depends. By elevating the mind it will, to quote the words of an eminent gardener, "create keen powers of observation, which, by exercising powers of adaptability, will make a man successful in any environment." Besides this, there is something so pleasing in it apart from its utility that I strongly recommend it to young men, who by perseverance will themselves become masters, and then thank botany for giving them a firm foundation to success. —L. W. YOUNG, in *Journal of Horticulture*.

#### GOOD WISHES FROM A NEW NURSERY CO.

THE NATIONAL NURSERYMAN,

Rochester, N. Y.

Gentlemen:

Find cheque enclosed for one year's subscription beginning with the January number. We are new in the nursery world but the infant is doing well and bids fair to become a very sturdy member of the large and prosperous family.

Our best wishes to you, and all brother nurserymen, for a happy and prosperous new year, and we want you all to

know that if you ever visit Pensacola you will find the latch-string outside under the sign which reads:

THE PENSACOLA SEED & NURSERY CO.

Pensacola, Florida.

The above company has recently been incorporated with capital stock of \$25,000. W. B. Vincent is president.

Hearty good wishes for success.

EDITOR.

### THE SHADE TREE PROBLEM OF CITIES

Extract from an Address before the Annual Convention of the American Civic Association, Baltimore, Md., by HENRY N. CASTLE.

#### SELECTING AND PLANTING THE TREES

The next question arises, what trees shall we plant? It would take a half hour to discuss the reason why the list of desirable trees for street planting can be counted on the fingers of one's hands, and then not counting the thumbs! Experience has shown that the following are suitable trees: The Norway Maple, Oriental Plane, American Elm, Red, Thin and Yellow Oaks and the Japanese Ginkgo. With the proper care in handling from the nursery to the street root bed, you can count on these trees living and proving good street trees. Under specially favorable conditions you might add the European Linden, the Sweet Gum and the Paper Mulberry (the non-fruit-bearing variety). Where parkway areas are 12 feet or more in width, or upon small parks, there may be grown, producing a beautiful effect, the Crepe Myrtle, pink and white alternating, the Horse Chestnut, the Smoke Tree, and, with a water margin, the Willow Tree. Each locality will have to work out and determine its own proper trees, but, as will be seen, the list from which to choose is very limited.

Having determined the kind of trees and the kind to be planted upon each street, then the question arises, what size tree shall we plant? Here again experience teaches that with trees shipped from outside nurseries, those caliper 1½ to 1¾ inch, 6 inches from the ground, are more likely to live than those of larger size. When trees can be taken from the home nursery and planted the same day they are taken from the ground, the larger sizes can be planted safely up to 2½ to 3 inches caliper. In ordering your trees, secure bids from half a dozen or more reputable nurseries, specifying the number and size of each kind desired and condition that the trees shall be thrifty transplanted stock, free from disease, with straight trunks suitable for street trees, capable of trimming to not less than 7 feet from the ground, with uncut leaders and an abundance of fibrous roots, and that protection must be given the roots from the moment the tree is taken up until packed in the car with moist straw, leaves or mulch. On receipt of the car the trees should be carefully unloaded by your own men, the roots covered with damp burlap or other covering, so that there shall be no exposure to wind or sun from the car to your nursery, and there the trees should be heeled in immediately as unloaded from the wagon. When planting upon the streets take up only such trees as you may immediately need, keeping the roots covered with a moist covering until placed in their final location. The particulars as to the preparation of the root bed, manner of planting, the placing of guards, the after cultivation and

watering of the trees, may be obtained from the specifications adopted by the Norfolk Commission for the guidance of its men and inquiring citizens.—*The American City*.

### PANAMA-PACIFIC INTERNATIONAL EXPOSITION, 1915

SAN FRANCISCO, CAL., January 6th, 1913.

NATIONAL NURSERYMAN Publishing Co.,  
Rochester, N. Y.

Dear Sirs:

The Department of Horticulture of the Panama-Pacific International Exposition, realizing the necessity of calling the attention of prospective exhibitors to the preparations for getting such exhibits in order as they have in view for the exposition, is taking the matter up now so those who are interested will be fully in touch with the situation.

In addition to the Horticultural building, which will contain 207,000 square feet of floor space, there will be a large acreage available for exhibits of trees, flowers, shrubs, etc., in the open. The interest which is being manifested throughout the world in the exposition is going to make this space inadequate to fully care for all of the exhibits unless they are classified in such a manner that we will fully understand how to apportion space to the various divisions that will combine to produce an effective horticultural exhibit.

On account of our very favorable climatic conditions, and the fact that the buildings to take care of the exhibits will be completed, we are planning to have the outside exhibits growing and in the ground at least a year in advance of the opening of the exposition. In order that exhibitors can prepare plants, trees and shrubs it will be necessary that they commence such exhibits as they may have in view not later than next spring. The horticultural display will be made one of the leading features of this exposition. The climatic conditions are so much more favorable than that of any other world's fair held in the United States that we are placed in a position to bring about results from a horticultural standpoint which it has been utterly impossible to do heretofore.

We would like to have you advise your State Commission what you will have in view for exhibition purposes, and impress upon them the importance of making sufficient appropriation at an early date to make an exhibit creditable to the horticultural importance of your State. If we can be of any assistance in bringing about immediate action in working up an interest in all matters pertaining to horticulture we will cheerfully render any service in our power.

Yours very truly,

G. S. DENNISON,  
Representative of the Chief,  
Department of Horticulture.

NATIONAL NURSERYMAN,

Dear Sirs: Please continue my "ad" for another three months. Results have been very good.

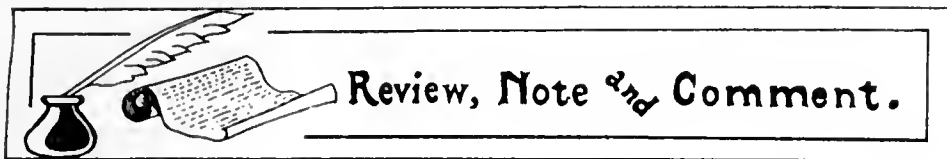
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### THE INTERNATIONAL FLOWER SHOW

The International Flower Show committee are sending out the prospectus of the coming International Flower Show, which will be held at the New York Grand Central Palace, New York, on April 5th to the 12th. This Show gives promise of being the finest ever held in this country. It is unfortunate, as far as the nurseryman is concerned, that it comes at a time when nurserymen can ill spare the time to attend, yet is it a great pity if an effort is not made to have the nursery business well represented.

The Jewell Nursery Company, Lake City, Minnesota, in their house organ for January, features Silver-leaf Poplar, *Spiraea Van Houttei*, *Spiraea sorbifolia*, *Clematis*, *Juniperus Sabina* and a number of other good things of which, judging from their list, they evidently have an immense stock.

There is a cut of a novelty "The Siberian Hedgewood," a dwarf Willow that looks good.

Forest Nursery and Seed Co., McMinnville, Tenn., have issued their December list of nursery grown and collected stock. They carry lots of good stuff for lining out. Such stock as Holly, Leatherwood and American Beech are scarce in nurseries.

Horticultural Sales Company, Sterretts, Shelby Co., Ala., have issued a very complete list of Tree, Shrub, Vine and Fruit Seeds.

Harlan P. Kelsey's catalogue has an individuality of its own, both in make-up and the stock it offers. He is one of the leaders in good native stock. Having nurseries at Saginaw, N. C. and at Salem, Mass., he is situated to do business in a large territory. Rhododendrons and Azaleas are his specialty.

A noteworthy catalogue is being sent out by the William P. Stark Nurseries, Stark City, Mo. They are featuring the J. H. Hale peach in color on the cover. There is nothing stereotyped about this catalogue, it is really a handy reference book on fruits. The descriptions are particularly lucid and well written.

The Conard & Jones Company, West Grove, Pa., have issued their new Floral Guide for 1913. On the front cover

there is a superb piece of color work illustrating the new rose Jonkheer J. L. Mock, and on the back and inside covers done in color are some of their standard varieties of Roses and Cannas. It is an exceedingly attractive book and should be a first-class salesman.

It is evident that Mr. Wintzer is still making great strides in the improvement of the Canna. Although the Conard & Jones Company are best known as specialists in Roses and Cannas, they handle a large line of hardy shrubbery, perennials and bedding plants, bulbs and flower seeds.

An innovation is free delivery on amounts over five dollars for stock selected in this catalogue.

A fine little hand book for fruit growers is being issued by the B. G. Pratt Company, 50 Church street, New York. It lists everything needed for fruit growing in the way of supplies.

W. F. Allen of Salisbury, Maryland, has sent out a very attractive calendar to his customers of last year. Mr. Allen has an up-to-date nursery and is one of the leading strawberry growers in the country.

### PARCEL POST

There seems to be many conflicting opinions regarding the rules governing the shipment of nursery stock by parcel post. The following is a brief summary:

Nursery stock may be shipped by parcel post.

The Zone rate does not apply to nursery stock.

The rate is two ounces for one cent, regardless of distance.

Size of packages must not exceed 72 inches, length and girth combined, weight must not exceed eleven pounds.

Parcels must have the name and address of the sender.

Parcel post packages are under exactly the same inspection and quarantine laws as shipments by express or freight.

### EXPORTING TREES

We import such a great quantity of ornamental trees, shrubs, and evergreens annually that a movement the other way is worthy of note.

John Waterer & Sons, Bagshot, Surry, England, the noted Rhododendron Specialists purchased a quantity of fine large Japanese Maples from Thomas Meehan & Sons for shipment to England.

The time may not be ripe for much business in this line, but there are possibilities in the future.

Advance sheets from *Monthly Summary of Commerce and Finance* for November 1912 gives the following report of imports of plants, trees, shrubs and vines:

	NOVEMBER—				ELEVEN MONTHS ENDING NOVEMBER—					
	1911		1912		1910		1911		1912	
	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values
Plants, trees, shrubs and vines:										
Fruit plants, tropical and semi-tropical, for propagating purposes . . . . . free . . . . .		1,142		263				2,052		13,156
Bulbs, bulbous roots, or corms, cultivated for their flowers or foliage . . . . . M. . . dut . . .	19,322	223,819	21,549	271,595		1,400,778		1,671,734	286,618	1,727,505
All other . . . . . dut . . .		161,197		148,051		1,030,420		1,117,439		1,181,339
Total . . . . .		386,458		419,909		2,431,198		2,791,225		2,922,002

# The National Nurseryman

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It circulates throughout the United States, Canada and Europe.

Official Journal of American Association of Nurserymen

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

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Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Rochester, N. Y.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Address, Editor, Flourtown, Pa.

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ROCHESTER, N. Y., FEBRUARY, 1913.

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Western Association of Nurserymen—President, Geo. A. Marshall, Arlington, Nebr.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.  
The California Association of Nurserymen—President, W. V. Eberly, Niles, Cal.; Secretary, H. W. Kruckeberg, Los Angeles, Cal.

## COST OF PRODUCTION

It is very gratifying to note the similarity of opinion on the subject of cost, as published in our last issue, and although there is evidently no royal road to ascertaining the cost of growing nursery stock, as the patent medicine man says, "There is hope." Every nurseryman evidently sees the importance of it, but many are evidently under the impression that supply and demand set the selling price, and are willing to keep on gambling with the growing of stock without knowing where the line of safety is. A better understanding of selling price would be that it is set by the cost of production, supply and demand rather than determine the amount of profit.

This seems to be the view of the Courts in their recent investigation of the trusts and monopolies. They forbid rebating or selling under cost as in the case of the railroads selling their services at reduced rates to preferred customers, and they forbid a monopoly for the purpose of boosting prices.

If we go down to first principles we recognize that necessities must be had at any cost and doubtless supply does figure in the price, but the moment we leave them and get into luxuries, there are many other influences at work that have to do with the selling price.

The recent advance in price along all lines has not been the result of a shortage, for according to reports the past year was a banner one for crops, but rather due to a greater cost of production.

The nurseryman that sits back and waits for demand to fix his price is liable to get left. He must find a market and create a demand and get better prices by delivering better stock and better profits by using better methods. A large order gentlemen, but possible. It is evident that the consensus of opinion tends to the view that finding cost on a mixed nursery is impractical but that general averages over a number of years will give it. It is a pretty safe statement to make—that if all the knowledge of cost as ascertained by the different growers could be recorded we should know near enough what the selling price, on a given item, ought to be, and the nurseryman who could not produce at those figures would do better to concentrate on things he could grow to better advantage.

Practically all nurserymen admit the influence of other price lists in fixing their own. This makes the man with a surplus or the man that must sell at any price, too severely felt in the beginning of the season.

There is excuse for the man cutting prices at the end of the season when he has no choice but the brush pile, but it is radically wrong for the surplus man to bear down prices at the time the catalogues are made.

The lesson to be learned from the expression of opinion on cost is mainly to have more backbone and independence of what others are doing, and base prices on known cost as near as they can be arrived at and never underprice the other fellow unless you are sure you are making a profit. It shows the tremendous advantage there would be in getting a little closer together. The nursery business has plenty of outside handicaps without having a cut-throat policy within itself.

**TARIFF**

The NATIONAL NURSERYMAN has gone to some length to get the general sentiment of the nurserymen on the proposed tariff which the new Congress will enact. Letters have been received from prominent nurserymen east and west, north and south. Some suggest that the duty on second-grade of fruit stocks might be lower, and again others that they should be higher. Then a few, a very few, believe that a cent or two reduction on roses might be advantageous, but by far the greater number advocate the retention of the present rate of four cents per plant. Some slight changes in the duty on ornamental stock were likewise suggested.

In a country of the size of the United States, where soil, climate and conditions vary so greatly in widely spread sections and locations, it could hardly be expected that all nurserymen would hold the same opinions on a subject so diversified and yet of such vast importance; a subject which has been the constant study of our most eminent legislators for many years. Yet in all the replies received from nurserymen on the tariff question this one sentiment was most forcibly emphasized. *Make no material reduction in the present rate of duty!*

That chairman Rouse and his committee on tariff were fully advised of the prevailing sentiment of the nurserymen, is well answered, and his attitude at the hearing before the the Ways and Means Committee in Washington, wherein he pleads that the present rate of duty be maintained, will no doubt receive the endorsement and approval of all broad-minded men.

But the good work must not end here. The hearings before the Ways and Means Committee are but preliminary to the drafting of the bill and it will require the constant watchfulness of Mr. Rouse to see that the present rate of duties are written in the new bill without change. But even with its passage by the House, the Senate must concur before the bill becomes a law, and here again it will be necessary to be on guard to prevent an attempt to alter or reduce the present duties which the nurserymen, as a whole, desire should be continued.

**QUARANTINE LAWS**

The recent experience in regard to the quarantine laws teaches a good lesson, and should be taken to heart as there is little doubt that had the nurserymen of the Middle West been with the Eastern nurserymen on the subject, quarantine laws with all their attendant humbug would never have been passed.

The nurserymen of the Middle West did not realize what power for injury to their business was contained in their desire for federal inspection. The creation of a Frankenstein monster is easier than the control. The nurserymen would be willing to groan under the rules and regulations of the quarantine laws if there were less disease and pests to fight, but alas, he knows only too well they will be as prevalent as ever, and he doubts very much if the inspectors would recognize a new enemy if they saw one.

Like the San José Scale and Chestnut Blight "it is by their works ye shall know them," and their works are not conspicuous until they are well established among us.

The rabbit is not a plague in England or America, but it proved so in Australia.

The San José Scale is not a plague in the Orient, but it proved so in the Occident.

The measles are not much feared in our latitudes, but in the far north it becomes a deadly disease.

The diseases and pests that are continually coming to light are not new ones; they are old ones that find hosts and conditions just suited to them, and multiply accordingly until they complete their cycle of existence, or conditions change and they fall into innocuous desuetude.

The Gypsy Moth is a scourge in New England, but it has yet to be proved that it would be a scourge in Pennsylvania, or in all localities. Considering how long it has been in New England it seems strange that it has not spread all over the country. In any event, very few thinking men believe a quarantine will prevent its spread, if the field is a fertile one for its propagation.

Some day perhaps the bag worm will acquire extraordinary virility and become a menace.

The fact is, man is continually upsetting the balance of nature and the inevitable occurs. He cuts down the forests, dries up the streams and like the goats on the Island of Juan Fernandez, destroys the entire flora and along with it other forms of life, and introduces a foreign flora and then is apt to get hysterical if some form of life runs riot at the expense of his interests.

Science is purely and simply organized knowledge, and the scientific entomologist is no more fitted to make laws governing the nursery business than the scientific nurseryman is to make them for the agriculturist. Each have just enough knowledge about each other's business to make the use of that knowledge dangerous if used in an arbitrary manner.

What is wanted is less hysteria, both political and otherwise, and more everyday business sense.

The florist does not call for quarantine laws to protect him against mildew, black spot, stem rot, aphids, etc. An expert florist can produce a crop of any of these diseases in 48 hours, and it stands to reason that if he knows how to produce, he also knows how to prevent.

While the orchardists, nurserymen and foresters have not conditions so completely under control as the florist, the same rule applies.

The scientists are doing good work in labelling out enemies and friends and experimenting with their control or increase, as the case may be. To this extent they are the good friends of the horticulturists, but beyond this their knowledge is not organized enough to act as dictator.

Just at the present we have put the entomologist where he acts as governor to the horticultural interests.

Are you satisfied with the results?

"We find your paper very interesting and wish you every success."

F. FERGUSON & SON.

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# A CONCEPTION OF DR. HOWARD

## CHIEF OF BUREAU OF ENTOMOLOGY OF THE DEPARTMENT OF AGRICULTURE

Dr. Leland Ossian Howard is the champion bug hunter, bug fighter, and bug gazer of the world. Moreover, he makes Ponce de Leon, who died searching for the Fountain of Youth, look like a peripatetic and paralyzed prune, and convinces you that Alexander Pope, who achieved fame by writing a somewhat stilted couplet warning people away from the Pierian spring, had an unnatural fear of fresh and refreshing water. Leland Ossian, when he is not at work, amuses himself with the greatest two-handed juggling performance known to the modern stage, lifting big dippers from the fountain with one hand and elevating large goblets of the Pierian with the other.

Briefly speaking, Dr. Howard is chief of the Bureau of Entomology in the Department of Agriculture (entomology being the highbrow word that means bugs and bugology), and he is the big bass horn of that band of Americans who, when they put on all the foreign decorations and orders of knighthood that have been given to them, weigh two hundred pounds above normal. And don't forget this: His pronouncement on Hymenoptera, which includes anything from an ant to an ichneumon, is a standard piece of work. Anybody who can kill off the housefly, tell a funny story, look human, and write about Hymenoptera, deserves richly, not to say prodigally, all the orders, decorations, degrees, sashes, inscriptions, tin horns, and medals that the world has hung across Leland Ossian's well developed and pumplike chest.

Everybody owes something to this investigator of insects. He is the patron saint of all those who wear thin stockings; for he is an engine of death when he gets on the track of a mosquito. He is the big brother of the farmer, because, in pursuing every insect that can hurt a crop, he is as swift as a Rupert, relentless as an Indian, and patient as a Spartan. And, when he finds a parasite or a bug that will eat up and kill off the destructive bugs, he lets out a yell of joy, dresses himself up gorgeously as a Christmas tree, rushes to his club, and beats the whey out of anybody who dares to play him a game of billiards. Every year the United States government, famous nowadays for its energetic economies, loosens up more than six hundred thousand dollars to pay him and his assistants to look through microscopes and fathom the innermost secrets of bug family life, or to travel through field and forest to find out what harm or good is done by insects visible or invisible.

It is his duty and delight to protect everything from a nut to an orchid, from an orchid to an orchard, from a cotton field to a forest. Mention to him the pear thrips or the Argentine ant, and he can tell you what time it goes to bed and how many minutes it lives. Ask him about the white fly or the cranberry insect, and, taking one long, lingering slant through his microscope, he will impart to you more about these small tribes than all the archeologists have ever learned about Egypt by deciphering the animals, annals, and annotations on the walls of the pyramids. If a farmer

in Michigan telegraphs him that a bug with sixteen legs is biting a sugar beet on the root, he sends one of his men to beat the bug that eats the beet. If he learns that some strange and Lilliputian invader is using a blade of wheat as a grapevine swing, he sends another agent to sit up nights with the wheat. He is the human bug-alarm system.

In the eighteen years that he has held his present position he has conquered the codling moth and added ten million dollars to the value of the apple crop of this country. Whenever a gipsy moth hears him coming, the bug works up a panic that would make the flight of the Turks before the Bulgarians look like a leisurely stroll down a summer lane when the shadows begin to fall and the cool of evening comes. He has fought the white scale that made merry with the orange and lemon orchards of California, and every week or two he declares war against a new kind of parasite that is injuring the forests—it being estimated that the bugs who go where the woodbine twineth do more damage to American timber than all the big forest fires throughout the country. On the other hand, if he hears of a beneficial parasite that lived in the hanging gardens of Babylon, or another that disports itself on the edge of the Zuyder Zee, he gags himself to keep himself from chattering his voluble enthusiasm, seizes a blank piece of paper, and orders a man across the ocean to bring back the parasitical and precious plunder.

To indicate the doctor's standing abroad, it may be well to remark that his book called "The House Fly—Disease Carrier," has been reprinted in London and translated into Hungarian and Swedish, and that practically the only country that has not elected him a member of its leading agricultural or scientific society is Sarawak, whose inhabitants have heads as hard as the cocoanuts they export.

Leland Ossian, in addition to being a crack shot at billiards, is a shark at bridge whist, a mighty man on the golf links, and a dreamer of the third degree when he hears good music. Furthermore, departing from the habits and habiliments of science, he wears neither baggy trousers nor long hair.—James Hay, Jr. in *Sunday Magazine*.

## UNUSUAL WEATHER CONDITIONS IN CONNECTICUT

Here at New Haven, Connecticut, we have had so far practically no freezing weather this year, and at the present time there is no frost whatsoever in the ground. Should this weather continue much longer buds of deciduous trees will be seriously injured.

The Connecticut River has not been closed to navigation this year a condition not before known in its history.

THE ELM CITY NURSERY CO.

New Haven, Conn.

"We think your journal is all O K and do not want to do without it."  
Missouri. W. H. ROEDER.



# Report of the Special Committee of the American Forestry Association Appointed January 9, 1912, for Consideration of the Subject of State Owned Versus Privately Owned Nurseries

From the investigations of this Committee under the resolution adopted at the last meeting, authorizing its appointment for considering "the advantages of State nurseries for the propagation, cultivation and sale of forestry material in competition with the business of private owners," it is our conviction that the matter of producing and distributing forestry material is one of such importance to the people of the country, that the subject should be handled as a matter of mutual interest, on the part of the United States Forestry Department, the different States, this Association, and those owning private nurseries and engaged in the business, rather than as a subject which might cause antagonism between the States and private nurseries.

The Committee wishes to emphasize the fact that the suggestion for investigating the subject arose more from a desire on the part of nurserymen to have the subject investigated than on the part of the Association.

From various data obtained by the Committee from the leading Foresters and representative firms engaged in the business, the following summary of opinions is here presented: The opinion of State foresters who are conducting State nurseries, all other State foresters and all foresters in other employment, is, with two exceptions, unanimous, that State nurseries should be permitted to sell stock to private parties mainly for the following reasons:

(a) Previous to the establishment of State nurseries private nurseries had not furnished stock at prices which would permit the planting of large quantities of trees for forestry purposes.

(b) As a result there was comparatively small demand for nursery stock for forest planting until certain States instituted the policy of supplying such stock to private planters.

(c) The demand for nursery stock for forest planting is largely the result of this policy on the part of the States, and the claim is made that private nurseries have in the aggregate been benefitted rather than injured by it.

(d) The State is justified in encouraging forestry planting by assisting private owners to obtain cheap nursery stock in order to secure to the community the benefits of forestry.

Private nurserymen contend and are generally of the opinion that,

1. State nurseries which sell to private parties act to deprive privately owned nurseries of their legitimate business, causing them financial loss and should be prohibited from competing with them.

2. They also contend that it is not the proper function of a State to engage in this industrial enterprise more than in the manufacture and sale of any commercial product in which large amounts of private capital are already invested.

Between these opposing opinions decision should rest upon ascertainable facts bearing on the cost of producing and distributing nursery stock of the desired quality and quantity, and the prices asked for this stock by States and private nurseries, respectively, upon the demand for stock for this specific purpose and the supply of nursery stock available from States and from private nurseries.

The committee is advised by the United States Forest Service that ten States reported maintaining forest nurseries, the aggregate acreage of which is 140.5 acres: Connecticut, Kansas, Massachusetts, Michigan, New Hampshire, New York, Ohio, Pennsylvania, Vermont and Wisconsin. There were produced during the past year 19,058,000 plants, including both seedlings and transplants. The cost of raising this stock varied for seedlings from 45 cents to \$5 per thousand plants, with an average of \$2.50 per thousand; and for transplants, from \$2 to \$6 per thousand, with an average of \$4.50. This covered all species, both hardwoods and soft woods. The hardwoods were in all cases seedling stock and very much in the minority. The number of plants distributed by these States amounted to 14,001,100, for which a price varying from \$1 to \$7 per thousand was charged, the average being \$4 for both seedlings and transplants, as well as hardwoods and softwoods. The apparent discrepancy between the figures of production and distribution is accounted for by the fact that several of the States are themselves large users of the planting stock which they raise. There are a few States on the other hand that distribute considerably more stock than they produce, the additional amount of course being stock purchased from commercial dealers. Only two States report direct importation, the total of which amounts to less than 250,000 plants.

The committee has been unable to ascertain as to the cost of producing and distributing forestry material by privately owned nurseries.

The cost of raising forest nursery stock includes the following items:

(a) Initial cost of plant, as land, buildings, equipment, waterworks. The legitimate charge for the item of interest on investment and depreciation of equipment.

(b) Skilled supervision and overhead charges.

(c) Labor cost.

(d) Selling costs, including advertising.

(e) Legitimate profits.

These cost items vary according to the following conditions:

(a) Size of output. Overhead charges are greatly reduced with large annual output.

(b) Character of labor.

(c) Soil and climate.

(d) Assurance of definite and stable markets.

The variation in cost of production from these causes may be as great as 100 per cent.

State nurseries in computing costs, are apt to neglect certain elements, especially depreciation, interest, supervision, and, necessarily, profits, and on a basis of equal efficiency would tend to undersell private nurseries.

The demand for nursery stock for forest planting arises

(a) From large corporations doing extensive planting. These concerns have largely pursued the policy of raising their own stock, and are, therefore, seldom in the market.

(b) Smaller owners planting a few thousand trees per year. This demand is uncertain, constantly shifting, since the same persons do not continue as purchasers from year to year, and is largely influenced by the educational propaganda conducted by State foresters. In itself it forms an unreliable basis for conducting a commercial business.

It is apparently true that State nurseries have it in their power, by developing and increasing in size and output, to supply a very large proportion of the nursery stock required for private forest plantations, and at prices which will make it impossible for private firms to compete successfully with them in this field, in the absence of an assured market for their own output.

In European countries, private nurseries have been able to produce stock more cheaply than States can grow it, and States therefore purchase their stock in considerable quantities from private nurseries, and are their main customers. Demand is steady and permanent.

In conclusion the committee presents the following conclusions and suggestions:

(a) States are at present justified in raising their own nursery stock for reforesting State lands.

(b) Sales of nursery stock at low prices by State nurseries to private parties naturally tend to encourage forest planting by individuals.

(c) Low prices for nursery stock sold by States will have the effect of lowering the prices of stock sold by private nurseries for forest planting, but only under the conditions that State output does not monopolize the demand. Should the State output keep pace with the demand private nurseries will be forced out of their field of endeavor.

(d) The value of State nurseries as regulators of prices for forest stock is recognized, but the policy for the future should probably be for State nurseries to continue as regulators, along the lines indicated, rather than to assume permanent responsibility for the business.

(e) Present prices on two-year seedling stock sold by private nurseries, in most instances compare favorably with State prices. While prices for three-year transplants are, except in one or two instances, much higher than the State prices.

In view of the facts above stated, the committee recommends a policy of State purchase of such stock as may be procured to advantage from private nurseries and sale of subsequent sale to private parties, for planting purposes.

In the long run it will probably be better for both States and private land owners if States endeavor to encourage the

legitimate development of private nurseries in the field of supplying trees for forest planting, while retaining the right and ability to check extortionate prices, by supplying stock from State nurseries at low cost. This policy would mean careful consideration of the elements of cost in raising stock, and of the demand and size of output required to supplement and regulate the trade, in order that the States may act with fairness to the public on the one hand and the nursery companies on the other.

The committee doubts the advisability of free distribution of material for forest planting by States and considers that better results may obtain if proper prices are charged for the material.

Your committee desires to express its appreciation of the courtesy extended by State Commissioners, foresters and the owners of private nurseries for the data and information kindly submitted to it, and hope that the consideration of this subject by the Association may result in harmonious relations between the forestry department of the Government, each of the States and those engaged in the business, to the mutual advantage of all.

(Signed) FRED'K W. KELSEY,  
H. H. CHAPMAN,  
H. R. BRISTOL, Committee.

## TRANSPORTATION TO PORTLAND CONVENTION

Marsden B. Fox of Rochester, who is in charge of arranging for the transportation of the eastern delegates to the Portland convention next June, is already hustling. He recently sent out the following circular letter. Any one not receiving one of these letters should write Chairman Fox, giving him the information requested.

Dear Sirs:

The American Association of Nurserymen will hold its annual meeting June 18 to 20, 1913 at Portland, Oregon.

The shortest route will require about four days from Rochester and many of the Eastern nurserymen would enjoy travelling in a party, having a car to themselves.

In former years our genial friend, the late Chas. L. Yates, has kindly arranged these trips for the Rochester group and numerous expressions are now being made for similar transportation next June. Hence President Meehan and others have asked the writer to act as "Nurserymen's Passenger Agent."

It is desirable to know early, about how many are going, and if you are interested, please answer questions and mail enclosed card, so that lowest possible rates may be obtained.

Will any representative from your firm attend the Nurserymen's convention? .....

If so, how many? .....

Are you interested in knowing rates and full information? .....

Would you like to join a party from Rochester in a special car for the out-going trip? .....

Yours very truly,

M. B. Fox.

## TARIFF

### Hearing of the Tarriff Committee of the American Association of Nurserymen before the Ways and Means Committee

The Ways and Means Committee of the House of Representatives are holding public hearings in Washington for the purpose of framing a new tariff bill to be presented to Congress at its next session.

By prearrangement, Irving Rouse of Rochester, New York, received a hearing before the Committee on Monday afternoon, January 20th. With him were John Dayton, Painesville, Ohio, Wm. Pitkin, Rochester, New York and Thomas B. Meehan, Dresher, Pa., all members of the Tariff Committee; also Wm. Flemmer, Springfield, New Jersey and Henry Moon, Morrisville, Pa., representing the Ornamental Growers' Association. Mr. Moon and Mr. Meehan were also there in behalf of the Pennsylvania Nurserymen's Association.

The Committee were unanimous in the opinion that it would be unwise to ask for any changes from the present tariff but to urge that the rates of duties now in force be maintained. It was conceded that some slight changes might be the means of opening up the entire subject, leaving the possibility of a severe cut in the present rate.

The argument of Chairman Rouse to the Ways and Means Committee was as follows: "Hon. C. F. Underwood, Chairman, and members of the Committee on Ways and Means.

Gentlemen: We represent the American Association of Nurserymen which embraces practically the entire nursery interests of the United States. We have also with us delegates from the Ornamental Growers' Association.

Previous to the last Tariff Act we had a mixed specific and ad valorem duty, and at the request of this Association Congress changed the law to a straight specific duty on seedlings as follows: Stocks, cuttings, or seedlings of Myrobolan Plum, Mahaleb and Mazzard Cherry, three years old or less \$1.00 per thousand plants, and on Apple, Pear and Quince stocks \$2.00 per thousand. This specific duty was what the nursery trade was anxious to secure and what we especially desire to have retained in the pending bill. It is really of more importance than the rate of duty.

We ask for a specific duty such as we now have, because these goods are an annual crop, like corn or potatoes, and are affected by the weather and climatic conditions and thus subject to violent fluctuations in price. At least 85 per cent of the crop is bought from three to nine months in advance of the actual delivery, as the goods can only be shipped in winter when the growth is completed and the plants dormant. Now the ten to fifteen per cent of the crop unsold in Europe at the beginning of the shipping season fixes the price, so far as the United States Appraisers valuation for duty is concerned, of the entire crop. If the demand is heavy or the crop poor, the price for this unsold balance is higher than the 85 per cent of the stock purchased early and there is no

way whereby the early buyer can tell what the market is at the time of shipment, and he is thus liable to fines and penalties by reason of the fact that he enters his invoices at actual prices purchased, which are or may be lower than the market price fixed by the Board of Appraisers. If on the contrary, the price for the unsold balance goes down, the importer does not benefit, as he must pay on invoice prices even if they are higher than the market rates at the time of shipment. This creates an almost intolerable situation. A straight specific duty avoids this trouble entirely.

On stocks, cuttings, or seedlings of Myrobolan Plum, Mahaleb and Mazzard Cherry, Manetti, Multiflora and Brier Roses three years old or less we ask that the present rate of \$1 per thousand plants be continued.

The average prices quoted the past season by five of the leading French nurseries are: \$9.00 for Myrobolan Plum, \$5.00 for Mahaleb and \$8.00 for Mazzard Cherry and \$8.00 for rose stocks, an average of \$7.50 per thousand on which our present rate of \$1.00 per thousand amounts to 13 2-10 per cent ad valorem, the average price on stocks quoted the past season taken from the five leading French nurseries is Pear \$8.00 per thousand, Apple \$7.77 and Quinces \$6.00, so that the average for the entire list is \$7.07 and under the present duty schedule of \$2 per thousand we are paying 25 per cent ad valorem.

A specific duty also tends to lessen the planting of seedlings of inferior size and quality which do not produce strong and healthy trees, and which when met by a specific duty do not seek a market in the United States. Previous to the passage of the Dingley Act, very little of this stock was grown in this country. Today at least 80 per cent of all the Apple seedlings planted are grown here with a less quantity of other items.

For the above reasons we ask that the present specific duty on these items be retained.

Rose plants, budded, grafted or grown on their own roots, 4 cents each. Stocks, cuttings, and seedlings of all fruit and ornamental trees, deciduous and evergreen, shrubs and vines commonly known as nursery or greenhouse stock, not specially provided for in the section of this Act, 25 per cent ad valorem.

This latter rate is necessary. We formerly paid for unskilled labor from \$1.00 to \$1.50 per day, we are now paying \$1.75 to \$2.00 per day for the same labor. In France and Holland, where most of the stock comes from, there has been no material increase in labor in the past ten years.

The average price for nursery labor in France is 40 to 50 cents per day for eleven hours and from 30 to 50 cents per day for women, and in Holland from 30 to 60 cents per day for twelve hours as against \$1.75 to \$2.00 per day for nine or ten hours work in the nurseries of the United States.



When it is realized that 90 per cent of the cost of a rose plant is labor, it is readily seen that we must have some measure of protection.

The soil, climate, and moisture conditions of Holland, with her cheap labor, is particularly adapted to the turning out of rose plants quickly. The Hollander grows from 50 to 60 thousand plants to the acre. Here we grow from 18 to 20 thousand plants per acre. He produces large bushes but the growth is forced, the wood soft and pithy, and the plants do not succeed, seldom surviving over a year. The public does not know this and buys the plants because they appear cheap.

Nursery stock is in its nature perishable, it must be sold when it arrives at the marketable age and size. If it is not then sold it is dug and burned, it cannot be laid on the shelf and carried over to another season like merchandise. This condition led to the dumping of large consignments of stock from Europe to be sold by auction on commission, and all that was received above freight and expenses was clear gain. This was largely done previous to the duty of 25 per cent which the goods now carry.

We ask that the present rate of 25 per cent ad valorem on trees, shrubs, and evergreens, known as "Nursery stock," be retained.

The present rates of duty are now satisfactory, and there is less friction and fewer misunderstandings in administering the law than at any time within the last 20 years.

We also ask that Evergreen seedlings, now on the "free list" in paragraph 668, should be defined by the words "three years old or less."

### AMERICAN POMOLOGICAL SOCIETY

The American Pomological Society will hold its next annual meeting in Washington, D. C., about November 15, 1913.

In the death of our late Secretary, Professor Craig, the society has suffered a tremendous loss. Not alone in that he was an earnest, faithful worker, and an excellent officer, but also because it is quite impracticable to carry on with the same degree of efficiency the work that he had mapped out for the American Pomological Society for the next few years. At this time we need not mention the several "prospects" that he was working; suffice for this a reference to the last report. It were better perhaps, that we take up first that which lay closest to his heart—an increased membership. Were you aware that he had promised himself to push an active campaign for a heavy increase in the membership? It was one of his hopes that his next report would show a membership of at least one thousand. Ill health and arduous other duties kept him from realizing upon this promised effort. Death finally closed his labors and left to us the cherished memory to that which, not only "might have been" but surely would have been. The question that now occurs to those left to carry on the work is how best may we, at least in part, accomplish the results that he had in view?

Is it not possible that we, as individual members and officers, may carry forward to a successful conclusion this

part of the work that he contemplated? Could there be any higher tribute to his aspirations or more fitting testimonial to his memory, at this time, than that we as a body finish the task that he had set for himself—a labor that was to be at the expense of his vitality, but for our good? A service of self-sacrifice, one among many others, for his fellow-workers.

President Goodman and Treasurer Taft think we ought to make the total for 1913-1914, twelve hundred. That means that each present member's share will be one new one, and the officers, including all the vice-presidents, will be not less than three each. That is easy. We can all do it.

This is a splendid opportunity for the pomologists and horticulturists of New York, Canada and Iowa in particular to do credit to themselves and the name of Craig. His name has cast not a little lustre upon the pomology of these districts.

An honor conferred by the whole membership would have been highly gratifying to Professor Craig while here. It will be equally appreciated by his saddened friends and family now.

Now to the task! It is surely a labor of love. Do not delay! Do your share at once! Thrice welcome is that honor which is bestowed promptly.—*The American Pomologist*.

### BLOOD SPOT IN APPLES

A peculiar species of fruit now in the Norwich, Conn., market is the "Mike" apple. It has a fair skin, an excellent flavor and is extensively propagated thereabouts. Each individual apple exhibits somewhere in its pulp a red speck, like a tinge of fresh blood, and thereby hangs a strange legend.

The apple obtains its name from Micah Rood, a famer who lived upon the outlands of the Connecticut town in the eighteenth century. The son of Thomas Rood, one of Norwich's early settlers, Micah tilled his fertile acres with all the zest of youthful ambition.

But of a sudden his habits changed; he grew idle, restless and intemperate. He lost all interest in both work and worship. His cattle were neglected and his neighbors shunned. Some attributed the change to witchcraft; others hinted insanity.

Winter wore away, spring returned and the orchard of Micah Rood burst into blossom. On one tree, it was observed, the flowers had turned from white to red. The superstitious neighbors wondered, especially as Rood seemed drawn to this tree by some resistless fascination. August came and the red blossoms developed into fruit. When the large yellow apple fell from the branches each one was found to contain a well defined globule, known thereafter as "the drop of blood."

The freak of the apple tree deepened the mystery of Micah's behavior. Conjecture followed surmise, and soon it was remembered that during the previous fall a foreign peddler had passed through Norwich and had spent the night at Micah Rood's. He had never been seen again. Someone suggested that the young farmer had murdered him for his money and buried the body under the apple tree.

Search was made for the body of the stranger, but in vain, nor was any trace of his stock found among the possessions of the unhappy Micah. If a load of crime rested upon the conscience of the suspected farmer it never forced a confession from his lips. His farm drifted gradually into decay, and, too broken down to reclaim it, he wandered about town, disordered in mind and body.

He died in 1728, but while the blood-spotted apple continues to grow his name and history will be perpetuated. —*Green's Fruit Grower.*

## Obituary.

Mr. J. W. McNary, proprietor of Dayton and Xenia Nurseries, died December 31st, 1912, of pneumonia, aged fifty-five (55) years.

Mr. McNary was born in Harrison county, Ohio. Grew up on a farm to young manhood. He then engaged in the real estate business with an uncle in Logansport, Indiana, for a short time. Was later engaged in canvassing for a nursery firm in Central Ohio for a few years. In 1880 Mr. McNary came to Dayton and was made secretary of the Hoover & Gaines Nursery Company.

Mr. McNary leaves a widow, one daughter and two sons.

As we go to press it is with much regret we are informed of the death of T. V. Munson, of Dennison, Texas, who died at eight o'clock January 21st. Mr. Munson was one of the pioneer nurserymen of Texas, and has done much for the development of the fruit growing interests of that part of the country. He was an authority on the grape, having raised a considerable number of hybrids by hybridizing with the native sorts.

### HISTORY OF PLANT CLASSIFICATION

The history of the philosophical, scientific classification of plants is an interesting study. It takes us back to the time of Theophrastus, Pliny, and Dioscorides, whose classification, however, of the plants they knew was in such simple terms as herbs, shrubs, trees, and cereals. The ancients had no actual system of classification. The scientific study of plants began in the sixteenth century, when several famous herbals were published, including those of Otto Brunfels (Strasburg, 1530); William Turner, "the father of English botany"; L'Obel (Antwerp, 1576); and John Gerarde (London, 1597).

But plants were still classified in groups based on well-marked characters, such as broad or narrow leaves, bulbous or rhizomatous roots, or as fungi, *Umbelliferae*, *Stellatae*

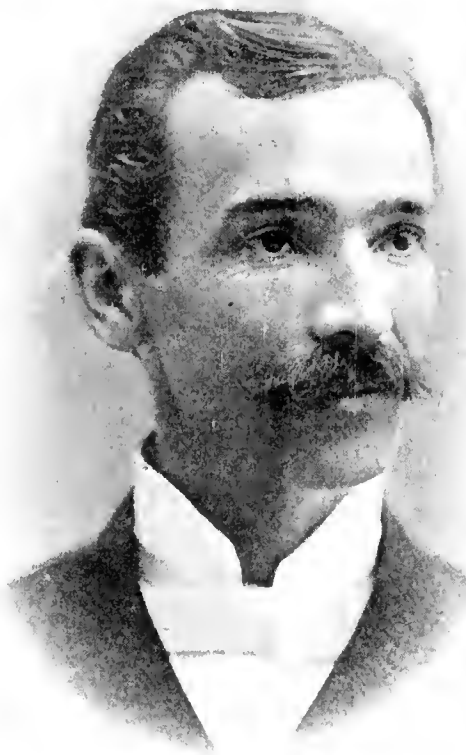
(*Rubiaceae*), *Vericillae* (*Labiatae*), and according to other general forms and manner of growth. The primary division was still into woody and herbaceous plants.

It appears to have been Caesalpino, an Italian, late in the sixteenth century, who first "studied the arrangements of plants from a philosophical point of view," and was the earliest to conclude that a natural classification "must be based on the characters of the flower, seed, and embryo." But the first scientific monograph on the fruit as a central subject of study was by the botanist, Robert Morison (1672). At a slightly later date the celebrated John Ray evolved a broad, general classification, and he was the first to distinguish the two great divisions of flowering plants, namely, the *monocotyledons* and the *dicotyledons*.

Tournefort follows. He invented an artificial system which had a considerable vogue because of its accurate definitions of genera; and he was succeeded by the great Linnæus (born 1707), whose "sexual system" was found to be so convenient, being based upon one set of organs, that it obtained universal adoption, and held sway for a long time. Eventually, however, it was discarded in favour of Linnæus's natural system, which A. L. de Jussieu (born 1748) developed, and whose nephew still further improved.

Following upon this the two de Candolles, father and son, "showed that the relationship of plants is ascertained by the comparative study of the form and development of organs (morphology)—not of their functions (physiology). Dr. Lindley, in our own country, further assisted on these lines. The reasoning, researches, and records of these botanists carried the science of classification a long step forward. Contemporaneously, Robert Brown, a greatly distinguished savant, had been investigating certain difficult morphological points in regard to seeds, and to him is due the discovery of the differences between *Angiosperms* (flowering plants) and *Gymnosperms* (conifers). During the last forty or fifty years the names of Endlicher, Hofmeister, Bentham, Hooker, Eichler, and Engler have each been identified with certain definite work in the building up of this science. At the present day Engler's represents the most generally accepted system of plant classification.—*Journal of Horticulture.*

A deal was closed the first of the year, whereby The Northwest Nursery Co., of Valley City, North Dakota, sold its interest in the Prairie Nurseries, Ltd., of Estevan, Saskatchewan to the residents of Estevan. The new management consists of E. C. Hilborn, President; W. J. Perkins, Vice-President; Theodore Torgeson, Secretary-Treasurer. Mr. Torgeson will also be Managing-director and H. C. Sandberg will be superintendent of propagation. The company is extensively enlarging its nursery and is planning to thoroughly canvass Saskatchewan with its salesforce.



J. W. McNARY.



From the U.S.D. & A.

The United States Department of Agriculture has issued a revised circular No. 41, under date of December 3d, 1912, giving the rules and regulations for carrying out the Plant Quarantine Act, and it also gives a list of State Inspection officials with addresses.

### CIRCULAR OF INFORMATION NO. 2 TO IMPORTERS OF NURSERY STOCK

As a result of the experience gained during the last two or three months, it has seemed advisable to slightly amend the rules and regulations for carrying out the Federal Plant Quarantine Act. The object of this circular is to point out specifically, for the information and guidance of importers, the changes made in the regulations.

No material changes are made in Regulations 1 to 5, inclusive.

Reg. 1.—No change.

Reg. 2.—No material change.

Reg. 3.—Definition of port of entry added.

Reg. 4.—Addition of the explanatory words "at port of entry"; bonded period to obtain permit extended from 10 to 20 days; errors corrected in line 8—"arrival" changed to "entry."

Reg. 5.—Addition of explanatory paragraph relating to shipments in bond.

Reg. 6.—Change to indicate more plainly the requirements in force after July 1, 1913, in relation to the official inspection certificate and limiting the importation of nursery stock from countries having no provision for such official certification, such as certain Asiatic and Central and South American countries.

Reg. 7.—Made to indicate more explicitly the nature of the certificate of inspection which will be required after July 1, 1913.

Reg. 8.—Amended at the suggestion of Customs Bureau, Treasury Department, to require the notice of importer or broker to the Secretary of Agriculture to be transmitted through the Collector of Customs at port of entry. This notice is to be given to the collector with other entry papers, and will be compared with the invoice and forwarded by the collector to the Secretary of Agriculture. This will accomplish both the notice required from the Treasury Department to the Secretary of Agriculture and the notice from the importer to the Secretary of Agriculture on one blank in one report, and will save the importer the labor and cost of mailing this report.

The notice required of the importer to the State Inspector must, as is now required, be sent by him direct to the proper State official.

Blanks for these two reports—namely, to the Secretary of Agriculture through the Collector of Customs and to the State Inspector—will be furnished by the Collectors of Customs.

There is added to this regulation an explanatory paragraph in relation to the requirements of the act governing the reshipment, interstate, of imported nursery stock, which has not been inspected at the destination reported from the port of entry.

Reg. 9.—Changed merely to lessen the requirements by eliminating some of the information originally provided for. A paragraph is added, making it possible in the absence of the declaration to deliver the goods under bond in the same manner as provided for a lacking permit.

It will be noted that practically all of these changes are corrections of errors, explanatory, or lessening the requirements. The only exception is the limitation placed upon the importation from countries where no inspection certificate is possible, and this can be corrected by any of these countries whenever commercial possibilities indicate the need. This limitation will not affect ordinary commercial nursery importations.

FEDERAL HORTICULTURAL BOARD.

APPROVED:

James Wilson

Secretary of Agriculture.

October 16, 1912.

### From the Experiment Stations

#### NEW YORK AGRICULTURAL EXPERIMENT STATION BRIEF NOTICE OF BULLETIN 350

Bulletin No. 350 of the Station at Geneva discusses an entirely new line of work,—apple breeding. It gives descriptions of fourteen new varieties from crosses of known parents, with a discussion of the apparent inheritance of characters, thus making it of interest to both apple growers and students of breeding. It may be secured, in either regular or popular edition, by addressing the Station.

#### REVIEW OF BULLETIN NO. 350

Scientific apple-breeding, or even careful work along this line by amateurs, has hitherto been practically unknown; so that we have exceedingly little knowledge as to how our very numerous varieties of this fruit have arisen and even less information that would guide us in producing new sorts. Undoubtedly most of the apples we grow now are chance seedlings from unknown parents, the few desirable types from thousands or even hundreds of thousands of seedlings whose growth to fruiting and selection or destruction has meant waste in time, attention and land occupied; while the final results have given no principles to govern future work.

If experiments made at the Station at Geneva are reliable, much of this economic waste in originating new varieties may be avoided by crossing known parents. Bulletin No. 350 of this Station gives descriptions of fourteen new varieties, as good or better than their parents, that came from 148 seedlings, the result of crossing eleven selected varieties. Nearly as many more seedlings are retained for further testing as promising kinds. This large percentage of good or



promising apples from known crosses augurs well for future work along this line, while the comparisons between parent varieties and seedlings give the most definite indications yet secured regarding the inheritance of apple characters. These inheritance data are admittedly incomplete since they come only from the first generation progeny of known parents; while two or more generations are necessary to give very convincing evidence as to heredity; yet the behavior of these crosses is, scientifically, of equal or greater value than the practical utility of the new varieties. These, by the way, are named for counties in New York State.

Those interested in work of this kind, either as apple growers or as students may obtain the bulletin, in either popular or regular edition, by writing to the Station for it.

### BULLETINS OF INTEREST TO NURSERYMEN

NOTE.—The station publications noted in this list are not distributed by the Department of Agriculture, but can usually be obtained, as far as the supply will permit, by applying to the stations issuing them.

MAINE STATION, Orono, C. D. Woods, Director  
Elm Leaf Curl and Woolly Apple Aphid. By Edith M. Patch. (Bulletin 203, pp. 235-258, pls. 3, figs. 10.)

Observations as to the migration of the woolly aphid from elm leaf curl to apple are reported. A brief account of the habits and injuries and methods of control of the insect, with references to the literature of the subject are given. Plant Diseases Induced by *Sclerotinia perplexa* n. sp. By W. H. Lawrence. (Bulletin 107, pp. 3-22, figs. 9.)

Studies of the characteristics of a root-rot disease of different cultivated plants of Washington caused by a fungus which the author proposes to name *S. perplexa* and the action of the fungus upon different host plants and its behavior in culture media are reported.

Bluestem of the Black Raspberry. By W. H. Lawrence.

Studies of the characteristics and mode of injury of the disease as shown by its effect on the stems, leaves, fruit, and roots of the blackberry plant, and the characteristics of the causal fungus which the author proposes to name *Acrostalagmus caulophagus* n. sp. are reported. Tests of the effect of copper sulphate and Bordeaux mixture for its control are also reported.

CONNECTICUT STATE STATION, New Haven, E. H. Jenkins,  
Director

Report on Commercial Fertilizers, 1912. By E. H. Jenkins and J. P. Street. (Annual Report, 1912, pt. 1, pp. 95.)

Analyses and valuations of fertilizers inspected by the station during 1912 are reported, with explanations.

NEW JERSEY STATIONS, New Brunswick, J. G. Lipman,  
Director

Nursery Insects. By H. B. Weiss and R. S. Patterson. (Circular 15, pp. 3-29, figs. 13.)

The life history and injuries of the more important insects of nurseries and methods of control under New Jersey conditions are described. Brief descriptive notes on spraying mixtures and references to the literature of the subject are also given.

### CHINESE ARBOR VITÆ

As a result of the work of plant introduction, some very valuable trees for planting in various parts of the United States have been brought in from foreign countries. Among these the Chinese Arbor Vitæ deserves special mention because of its qualities adapted for planting in dry regions.

The Chinese Arbor Vitæ is an evergreen tree that resembles the American Arbor Vitæ closely in leaf characteristics, but it is altogether unlike it in regard to its soil and climatic requirements.

The Chinese Arbor Vitæ is found growing in very dry mountainous regions in China, enduring extreme cold in dry locations, but unable to endure the winters where the humidity is great. It is a tree that has been planted extensively throughout the drier parts of China for ornamental purposes. In the temple courts and burial grounds specimens have been found that exceed 1,000 years of age. These trees are of extreme size, attaining a height of fifty or sixty feet and from four to twelve feet in diameter. It is a tree that readily adapts itself to a very wide range of soil conditions, growing thriftily in sandy soils as well as in hard clay soils, and in many instances is found growing in soils strongly alkaline.

It is less than twenty years ago since this tree was introduced into the United States. It has been planted quite extensively throughout Southwestern Kansas and Oklahoma, and wherever found, it is making a splendid growth. The tree shows no indication of injurious effects from either the drought, heat or cold that has been experienced in this time. It is a tree that should be used extensively for woodlot, windbreak and ornamental planting throughout the southwestern states.

When grown in the woodlot, it should be planted closely so as to shade off the lower limbs and develop a straight clean stem that will yield poles and posts. As a post timber it is very durable, comparing favorably with the American Arbor Vitæ (white cedar).

For windbreaks, three or more parallel rows should be planted eight feet apart and the trees set six feet apart in the row, the trees in one row alternating with the trees in the adjacent row. In ten or twelve years these trees will form a solid wall of limbs and foliage from the ground to the height which they attain. During youth, the Chinese Arbor Vitæ grows quite rapidly, the annual average height growth varying from fifteen to thirty inches per year, depending upon the character of the site.

For ornamental planting care should be taken to select suitable specimens for this purpose, the most desirable being low, compact trees with dense foliage. The foliage of the Chinese Arbor Vitæ is a deep green throughout the summer, changing to a dull brown with the approach of winter. The deep green is again resumed during the first few days of warm weather in the spring.

A commendable feature of the Chinese Arbor Vitæ is the ease with which it transplants. Nurserymen who have handled it in large numbers, say that there is no more loss in transplanting the Chinese Arbor Vitæ than there is in transplanting the cottonwood.—Chas. A. Scott in *American Forestry*.

## SOWING SEED OF HARDY HERBACEOUS PERENNIALS

It is not our intention in this article to give the best time for sowing the different varieties, we only wish to point out a few of the advantages and disadvantages of sowing in Spring or Fall. The chief advantages of Fall sowing are stronger plants next year, possibility of earlier planting in Spring and cold frames taking the place of greenhouses, cutting out that expense. Winter or early Spring sowing furnishes profitable employment to men when there is not much to be done, it also eliminates all risk of loss by Winter. Fall sowing is limited in the varieties which can be handled at this time, while most every variety which grows from seed can be sown in Spring with good results. To produce best results with Fall sown plants, seed should be sown early enough to allow plants to become well established. If potted up and left until they are well rooted they can be knocked out of pots and set in boxes or wintered over in pots. Proper care in protecting them during Winter has much to do with the result we expect to see in the Spring. If covered too early, mice get in and eat the roots of many varieties, sometimes ruining whole frames full. If covering is too light frost lifts plants out of the ground and roots being exposed, otherwise hardy plants are lost. It is well to wait until ground is frozen, then mice have found their winter quarters and travel but little, then place sufficient covering to afford good protection. With the first signs of Spring remove part of covering and loosen up what is left, affording protection but not enough to start growth; with this care small seedlings like Lobelia Cardinals have been wintered over and were ready to plant out as soon as ground was open, getting planted early and making better stock.

Seedlings sown in greenhouse, transplanted and kept growing, will produce good stock, but having soft growth, which must not be checked by frost, cannot be planted out until danger of frost is over, thus making planting season shorter.

As it does not pay to keep greenhouses merely for the few months in which seedlings are grown, many growers find themselves confronted with the problem of seedlings and no room for transplanting, this condition means the loss of thousands of plants every year, through damping off. Out door frames so placed that sufficient heat can be turned into them to keep out frost, appears to be the best solution and when the sun begins to get stronger stock grows better here than in greenhouses.

GEO. F. KIMBEL.

## CATALOGUES RECEIVED

Chase Nursery Co., Huntsville, Ala. Bulletin No. 1 for Winter and Spring of 1913.

Rice Bros. Co., Geneva, N. Y. January surplus list.

Southern Nursery Co., Winchester, Tenn. January Surplus list No. 1.

Huntsville Wholesale Nurseries, Huntsville, Ala. January Bulletin.

Richland Nurseries, Rochester, N. Y. Catalogue of Fruit and Ornamental Trees, Shrubs and Plants.

De Graaff Bros., Ltd., Leiden, Holland. Wholesale Catalogue of Bulbs and Plants.

Brown Bros. Company, Rochester, N. Y. Surplus list No. 2, Spring, 1913.

J. Jenkins & Son, Winona, Ohio. Wholesale price list of Surplus stock.

Greisa Nurseries, Lawrence, Kans. Spring 1913 trade list.

The National Nurseries, Lawrence, Kans. Illustrated catalogue of hardy Western grown nursery stock, 1913.

J. K. Henby & Son, Greenfield, Ind. Wholesale trade list, Spring 1913.

O. A. D. Baldwin, Bridgeman, Mich. Catalogue of Fruit Plants.

Fraser Nursery Co., Huntsville, Ala. Surplus list.

Davis Co., Nurseries, Harness Dix & Co., Roy, Utah. Illustrated catalogue of trees, shrubs and plants.

Stumpp & Walter Co., N. Y. Wholesale catalogue for florists and market gardeners.

J. H. Skinner & Co., North Topeka, Kans. Surplus list, Spring 1913.

California Nursery Co., Niles, Calif. Catalogue No. 3.

Forest Nursery & Seed Co., McMinnville, Tenn. Wholesale trade list.

L. L. May & Co., St. Paul, Minn. Special offer of Evergreen Seedlings.

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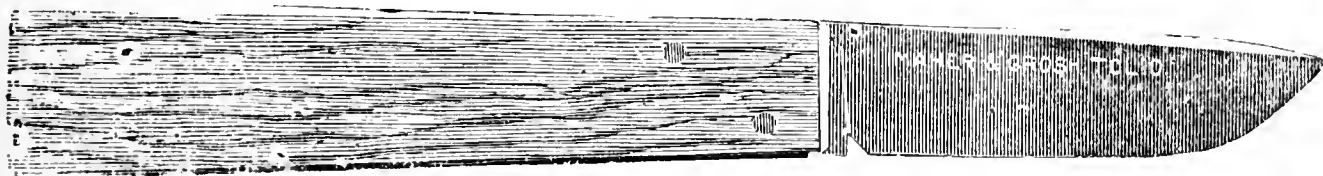
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Concolor  
Douglas Spruce  
Engelmanii Spruce  
European Larch

Jack Pine  
Norway Spruce  
Pinus Ponderosa  
Pitch Pine  
Red Spruce  
Scotch Pine  
White Pine  
White Spruce

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*General Assortment Nursery Stock*

## Apple, Cherry and Peach

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We offer a complete assortment of Nursery Stock

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STOCK EXTRA FINE

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All kinds of SHADE TREES running from 1/2 to 2 in.

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## Apple Seedlings

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APPLE GRAFTS, Whole and Piece Root made to order.

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## THE NATIONAL NURSERYMAN

INCORPORATED 1902

THE OFFICIAL ORGAN OF THE AMERICAN ASSOCIATION OF NURSERYMEN

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania to whom all correspondence pertaining to the Editorial Department, should be addressed.

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	5/8 up 4 1/2 to 6 ft.	1/2 to 5/8 4 to 5 ft.	3/4 to 1/2 3 to 4 ft.	2 to 3 ft.
Alexander .....	1660	660	1500	1500
Belle of Georgia.....	1020	920	900	600
Carman .....	3500	5500	3160	4900
Capt. Ede.....	4100	5190	3560	4440
Champion .....	2970	1120	1120	4700
Chair's Choice.....	430	680	780	660
Crawford's Early.....	5000	4220	3520	2460
Crawford's Late .....	4580	3960	3160	3000
Chinese Cling .....	490	20	440	380
Emma .....	70	60	80	160
ELBERTA .....	35250	23640	22920	13060
Fitzgerald .....	1280	540	780	500
Foster .....	1070	1440	2160	1900
Greensboro .....	440	300	360	380
Gold Dust .....	330	600	1140	1480
Heath Cling .....	780	1460	3100	2320
Henryetta .....			80	120
Hiley .....	1380	1000	600	440
Matthew's Beauty .....	570	220	240	220
Mayflower .....	160		540	1912
Miller Cling .....	425	342	223	185
Mt. Rose .....	112		212	265
O. M. Free .....	195	265	165	115
Ringgold Cling .....	65	325	765	925
Salway .....	2512	541		883
Sneed .....	1254	562	862	685
Smock .....	365	222	245	345
Stump .....	131	245	423	612
Triumph .....	1845	985	685	582
Thurber .....	255	184	223	224
Wheatland .....	655	625	925	1125
Wonderful .....	312	282	315	412

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ABOVE  
PEACH  
ARE  
CLEAN,  
SMOOTH  
AND  
HIGH-  
GRADE

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FOR  
PRICES

The above peaches are clean, smooth, high grade.  
Write for Prices.

## New Haven Nurseries

NEW HAVEN, MO.



# Shrubs and Roses

**Althea** Banner, 4 to 5 ft.  
Banner, 18 to 24 in.  
Banner, 5 to 6 ft.  
Banner, 2½ to 3 ft.

**Althea** Bicolor, 18 to 24 in.  
Bicolor, 3 to 3½ ft.  
Bicolor, 3 to 4 ft.

**Althea** Jeane d'Arc, 3 to 4 ft.  
Jeane d'Arc, 18 to 24 in.  
Jeane d'Arc, 5 ft.  
Jeane d'Arc, 2 to 3 ft.  
Jeane d'Arc, 4 to 5 ft.

**Althea** Meehani, 8 to 10 in.  
Meehani, 12 to 18 in.  
Meehani, 18 to 24 in.

**Althea** Pink, 18 to 24 in.  
Pink, 2 to 3 ft.  
Pink, 3 to 4 ft.

**Althea** Red, 18 to 24 in.  
Red, 3 to 4 ft.

**Althea** Violet, 12 to 18 in.  
Violet, 18 to 25 in.

**Azalea** Mollis Yellow, 18 to 20 in.

**Azalea** Mollis Named Sorts, 18 to 20 in.  
Mollis, Red, 18 to 20 in.  
Mollis, 6 to 8 in.

**Barberry** Thunbergii, 18 to 24 in.  
Thunbergii, 12 to 18 in.  
Thunbergii, 6 to 8 in.

**Crurnells**, 3 to 4 ft.  
Crurnells, 2 to 2½ ft.  
Crurnells, 3 ft.

**Deutzia** Crenata, 2½ to 3 ft.  
Crenata, 3 to 6 ft.  
Crenata, 4 to 5 ft.

**Deutzia** Gracilis, 12 to 18 in.

**Deutzia** Gracilis Rosea, 18 to 24 in.  
Gracilis Rosea, 2 to 3 ft.

**Deutzia** Lemoinii, 12 to 18 in.

**Deutzia** Pride of Rochester, 2½ to 3 ft.

**Euonymus** Japonica, 2 yr., 12 in.  
Radicans, 2 yr., 12 in.  
R. Variegata, 2 yr., 12 in.

**Forsythia** Golden Bell, 12 to 15 in.  
Golden Bell, 3 to 4 ft.

**Hydrangea** Paniculata Grandiflora,  
3 ft.  
Paniculata Grandiflora,  
12 to 18 in.

**Philadelphus** Single, 2 to 3 ft.  
Single, 4 to 5 ft.  
Single, 3 to 4 ft.

**Philadelphus** Double, 2 to 3 ft.  
Double, 4 to 5 ft.

**Privet** California, 18 to 24 in.  
California, 5 to 6 ft.  
California, 12 to 18 in.  
California, 2 to 3 in.

**Spirea** Anthony Waterer, 5 to 6 in.  
Anthony Waterer, 12 in.  
Anthony Waterer, 2 ft.

**Spirea** Prunifolia, 3 to 4 ft.  
Prunifolia, 12 to 15 in.  
Prunifolia, 3 to 3½ ft.  
Prunifolia, 3 to 4 ft.

**Spirea** Van Houttei, 10 to 12 in.  
Van Houttei, 3 to 4 ft.  
Van Houttei, 4 to 5 ft.  
Van Houttei, 12 to 18 in.

**Spirea** Forbelli, 2 ft.

**Viburnum** Opulus, 4 to 6 ft.  
Opulus, 3 to 4 ft.  
Opulus, 18 to 24 in.

**Viburnum** Plicatum, 5 to 6 ft.—Fine  
Plicatum, 12 to 18 in.

**Weigela** Candida, 2 to 3 ft.  
Candida, 5 to 6 ft.  
Eva Rathke, 4 ft. xxx  
Eva Rathke, 2½ to 3 ft.  
Eva Rathke, 2 to 2½ ft.  
Eva Rathke, 2 to 3 ft.  
Eva Rathke, 12 to 18 in.  
Eva Rathke, 18 to 24 in.  
Eva Rathke, 4 to 6 ft.  
Eva Rathke, 3 to 4 ft.  
Rosea, 18 to 24 in.  
Rosea, 3 to 4 ft.  
Rosea, 4 ft. xxx  
Variegata, 12 to 18 in.  
Variegata, 3 to 4 ft.

## CLIMBERS

**Honeysuckle** Heckrottii, 3 ft.  
Heckrottii, 8 to 12 in.

**Honeysuckle** Red-Coral, 3 ft.  
Red-Coral, 8 to 10 in.  
Red-Coral, 3 to 4 ft.

**Honeysuckle** Tatarica Yellow, 2½ to 3 ft.  
Honeysuckle Golden, 12 to 18 in.

## ROSES—Climbers

Universal Favorite, 3 yr.  
Violet Blue, 3 yr.  
Violet Blue, 1 yr.  
American Pillar, 1 yr.  
American Pillar, 2 yr.  
American Pillar, 3 yr.  
Dr. Van Fleet, 1 yr.  
Dr. Van Fleet, 2 yr.  
Miss Messman, 1 yr.  
Excelsa, 1 yr.  
Lady Gay, 1 yr.  
Hiawatha, 1 yr.  
Hiawatha, 2 yr.  
White Dorothy, 2 yr.  
White Dorothy, 1 yr.  
Gardenia, 1 yr.  
Dorothy Perkins, 1 yr.  
Flower Fairfield, 1 yr.  
White Rambler, 3 yr.  
No Light, 1 yr.  
No Light, 2 yr.  
No Light, 3 yr.  
Farquhar, 1 yr.  
Farquhar, 2 yr.  
Farquhar, 3 yr.  
Ruby Queen, 1 yr.  
Ruby Queen, 2 yr.  
Ruby Queen, 3 yr.  
May Queen, 1 yr.  
May Queen, 3 yr.  
Alba Rubifolia, 1 yr.  
Evangeline, 1 yr.  
Evangeline, 2 yr.  
Evangeline, 3 yr.

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Sir Thomas Lipton, 3 yr.  
Sir Thomas Lipton, 3 to 4 ft.  
Rugosa Magnifica, 12 to 18 in.  
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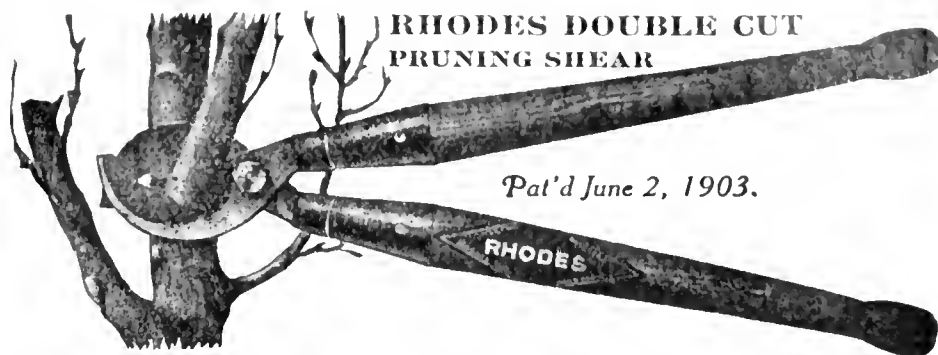
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We furnish the standard size of printed tree labels  
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Our capacity is such that we guarantee prompt shipments. Write for samples and prices giving estimate of number wanted.

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### One Year Apple Whips!

One Year and June Buds

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## Apple, Pear, Cherry and Peach Grape Vines, Blackberry and Raspberry Plants

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in all leading varieties. Stock has made the strongest and most vigorous growth in years.

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FRUIT AND SEED FARMS

*OFFER for Spring 1913*

**GRAPE VINES**—One and two years old. Varieties  
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For SPRING 1913

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Grade of Vines for Lining Out  
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**APPLE**—Two Year. All grades.  
**APPLE**—One Year. Cut Backs very strong.  
**SILVER MAPLE**. All grades.

Can furnish the above in Carload Lots or less. Also Pear,  
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Speciosa and ornamentals in good assortment.

Please submit list of wants for prices. Personal inspection  
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The Largest Stocks To Offer  
In First-Class Condition at  
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We are now ready to quote lowest prices on  
**FRUIT, SHADE AND ORNAMENTAL  
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PLANTS**

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**TREE SEEDS** we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list  
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**The Willadean Nurseries**  
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## J. H. SKINNER & CO.

Station "A," Topeka, Kansas.

**Fruit, Shade and  
Ornamental Trees**

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∴ FOREST TREE SEEDLING ∴

We have a splendid stock of  
**Grape Vines**

and other small fruit plants for the Nursery  
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and sure to please you.

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# THE NATIONAL NURSERYMAN



MARCH, 1913

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

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## CHERRY and STD. PEAR

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**APPLE and PEAR GRAFTS**—Made to order.

**APPLE TREES**—in car lots. Large assortment.

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is the name of the men who grow the finest

## CHERRY

that can be produced by suitable soil, climate and expert knowledge.

Take a look at the stock or ask for a sample and be convinced of the extra quality of their

## TREES

PEACH

ST. PEAR

APPLE—1 year, 2 year and 3 year  
AMERICANA PLUM ON PLUM  
COMPASS CHERRY ON PLUM

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WE OFFER THE FOLLOWING FROM  
OUR MAC CLENNEY NURSERY . . .

- 4000 Mulberries, mostly of Hicks variety, smooth and free from blight.
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- 10000 Roses, Teas, Hybrid Teas and Climbers, all grafted very low on Manetti roots. Field grown.
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- 25000 Chinese Arborvitae Seedlings, 2 and 3 year, 6 inch to 3 ft. sizes.
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A general variety of Orange and Grape Fruit Trees.  
Could also supply limited quantities of general list of Fruit and Ornamental Trees to be used to fill in with orders.

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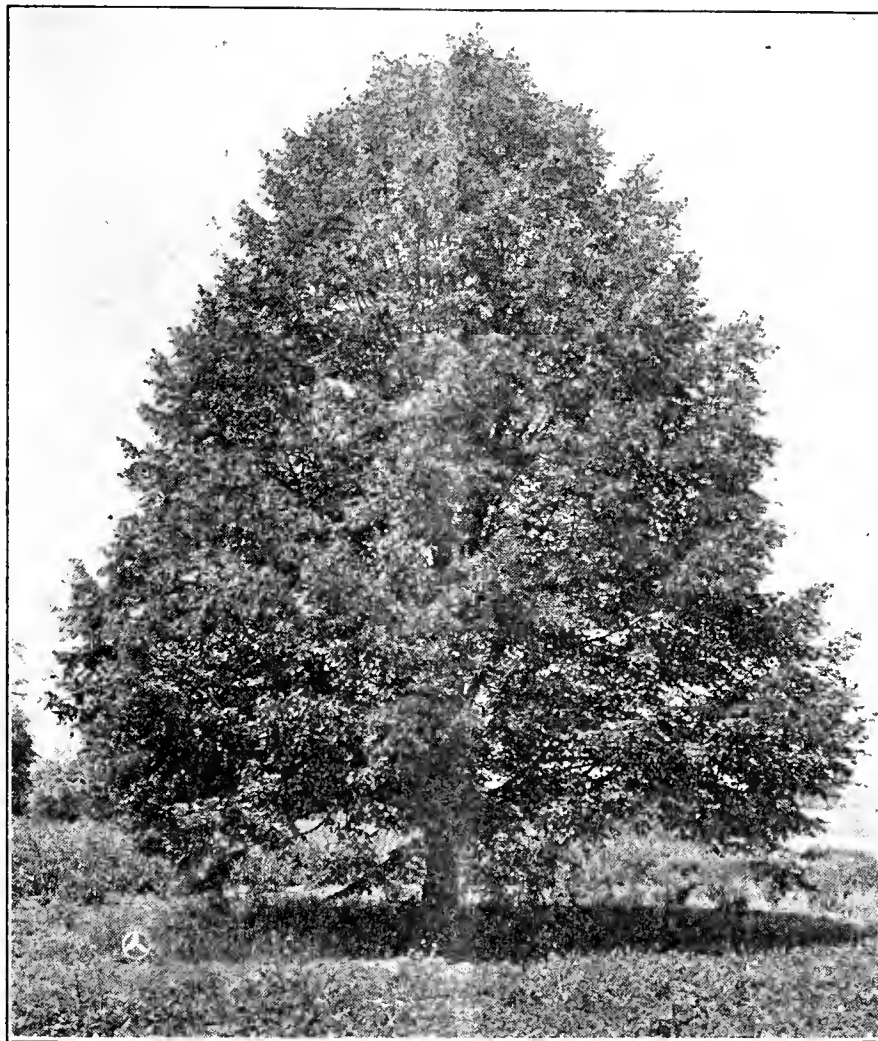
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Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses,  
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### A FEW SPECIALS WHILE THEY LAST :

STANDARD PEARS in assortment, DUCHESSE DWARF PEARS, BOURGEAT QUINCE,  
PRUNUS PISSARDI and TRILOBA, CUTHBERT and other Raspberries,  
CONCORD and other GRAPES

### OUR SPECIALTIES ARE

Roses, H. P. Moss, Ramblers, Climbers, etc., Peaches, Pears, Plums, Cherries,  
Ornamental Trees and Shrubs in car lots, Weeping Mulberries, Elm and Ash,  
Clematis, Ampelopsis, Paeonies, Hydrangeas, Bush and Tree Perennial Plants.

No Trouble to Price your List of Wants. 59 Years 1200 Acres 44 Greenhouses

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PAINESVILLE, OHIO

PLANT FOR PROFIT

## Berberry Thunbergii Seedlings

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## California Privet

2 years, cut back, a fine lot

—and—

## A General Line of Nursery Stock

will be shown in our bulletins issued frequently from January on during shipping season, but remember, WE DO give you good thrifty stock, good grading, good packing.

+ + +

## C. R. BURR & Co.

MANCHESTER, CONN.

A good assortment of stock is offered in our January Bulletin, not a complete assortment, because we do not grow all kinds of stock; we can't. We grow only the things that we can produce in such quality and quantity as will make our specialties known to the trade for their superior excellence and reasonable price. Our friends say we grow **ROSES, CLEMATIS, TREE HYDRANGEAS, TREE LILACS**, and a few other specialties that are very good, and quite out of the ordinary. Stock very suitable in fact, for use in high-class retail orders. If you fail to receive a copy of our January Bulletin, let us know about it, and we will send another. You and we are losing something by your not having one. Drop us a line and let us tell you about our Spring stock.

## Jackson & Perkins Company

WHOLESALE ONLY

NEWARK, NEW YORK

## SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY  
PEACH PLUM

A Fine Block of  
Own Root Roses

ORNAMENTAL TREES SHRUBS  
BERRIES CLEMATIS  
EVERGREENS PEONIES PHLOX  
PYRAMIDAL and STANDARD  
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists  
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63 Years

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## Berckmans' Specimens

We never call a tree or plant a "specimen" until it really has earned the title. Our evergreens are transplanted, sheared and root-pruned, each one getting just the proper attention to make it a really handsome and serviceable specimen. It *costs* more to produce such, but it's *worth* it—to us, to you and to your customers.

### Your Trade Will Be Pleased With Them

We offer a select but limited stock at wholesale this year. We call attention to our *Biotas*—*Aurea Nana*, *Aurea Conspicua*, and *Japonica Filiformis* (see illustration); *Retinospora*, *Thuya*, and *Juniper*—all in popular sizes for the trade.

Our Deciduous Shrubs include *Exochorda*, *Lilac*, *Spiraea*, *Althaea*, *Deutzia*, *Philadelphus*, and a very choice stock of *Teas' Weeping Mulberry*.

Broad-leaved Evergreens—*Azalea Indica* (Home-grown Plants) *Magnolia Fuscata*, *Aucuba*, *Ligustrum*, and *English Laurel*. Among our fruits, we direct particular attention to our clean, thrifty *Peach Trees*, of which we offer the the leading sorts.

### WRITE FOR PARTICULARS NOW

Tell us what you need, quantity, etc., and we will quote lowest price possible. Write early and get the best selections from our stock.

### P. J. Berckmans Co.

INCORPORATED

Fruitland Nurseries  
AUGUSTA, GEORGIA

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Nursery.

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EVERGREENS  
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MULBERRY  
PEACHES  
OTHER FRUITS



Biota Japonica Filiformis.

## The Best Tree Digger on Earth



Used and Recommended by Leading  
Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

**Stark Bros. Nursery & Orchards Co.**  
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It would be mighty easy to grow "Hill Quality" evergreens by letting them stand in the same beds where we sowed the seed, but such stock as we pride ourselves on doesn't come that way.

Our method is to transplant frequently, starting with the time the little fellows are hardly bigger than grass-blades—and you ought to see the roots such a tree develops! The intelligent care that

## Hill's Transplanted Young Evergreens

get in their "early childhood" makes them a valuable proposition for you if you are doing any business at all in evergreens or want to begin. We are Evergreen Specialists, as you'll promptly realize when you see our big Nurseries practically given to this one thing.

We have been at it for over fifty years; we have particularly good facilities, and we specialize on seedlings, and young transplants for nurserymen's and dealers' use, lining out, etc. There's an increasing demand for this sort of stock, and it will pay you to look into it. Write us about your wants, and get our Catalog.

**THE D. HILL NURSERY CO., Inc., Evergreen Specialists**  
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1. Our nurseries lie in a colder climate than the French, Dutch and English nurseries—
2. We grow all the stock we sell—
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OFFER A GENERAL ASSORTMENT  
OF NURSERY STOCK

Apple, Peach, Cherry  
Kieffer Pear  
Red Dutch Currants  
Silver Maple Shade Trees  
Catalpa Speciosa Seedlings  
Apple Seedlings and  
Japan Pear Seedlings

**A. Willis & Co.**

OTTAWA, KANSAS



# Heikes --- Huntsville --- Trees



**Huntsville  
Wholesale Nurseries  
Huntsville, Ala.  
JESSIE S. MOSS, Prop.**

We offer for Spring of 1913  
in large quantities as usual:

## SPECIALTIES

**APPLES**—Commercial varieties, one and two year, in large supply. As fine in quality as ever grown.  
**PEARS**—Kieffers, one and two years old. A much smaller crop than heretofore.  
**CHERRIES**—On Mazzard. Two year, Bing, Lambert, Napoleon, Black Tartarian.  
**CHERRIES**—On Mahaleb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.  
**PEACHES**—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.  
**ROSES**—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.  
**PRIVET**—Amoor River (South). Retains its foliage longer and holds its color better than California Privet.  
**PECAN SEEDLINGS**—Huntsville grown from selected nuts collected along the Gulf Coast. Thin shell.

See Price List for Particulars.

Address, **HUNTSVILLE WHOLESALE NURSERIES  
HUNTSVILLE, ALA.**

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**World's Choicest Nursery and Greenhouse Products**

**EVERGREENS and CONIFERS**, in several hundred kinds and varieties  
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**RHODODENDRONS**, Hardy, **ENGLISH HYBRIDS**, Maximum and Catawbiense  
**BOXWOOD**, in all shapes, forms and sizes  
**HARDY AZALEAS**, in all colors and varieties  
**HEDGE PLANTS**, in all popular kinds  
**FLOWERING SHRUBS**, in bush and standard forms in hundreds of kinds and varieties  
**SHADE TREES**, in hundreds of useful and attractive varieties  
**MAGNOLIAS** and other **FLOWERING TREES**  
**WEeping and STANDARD TREES**, in many varieties  
**JAPANESE MAPLES**, in all varieties and colors  
**HARDY TRAILING VINES** and **CLIMBERS**  
**HARDY VINES** and **CLIMBERS** in pots  
**SPRING and SUMMER FLOWERING BULBS, ROOTS** and **PLANTS**  
**PALMS and BAY TREES** by the thousands  
**FRUIT TREES**, home-grown, imported, **DWARF and TRAINED**  
**SMALL FRUITS**, in all kinds and varieties  
**NUT TREES**, profitable kinds  
**OLD-FASHIONED**, Hardy **FLOWERING PLANTS**, in thousands of kinds and varieties  
**PAEONIAS, IRIS, PHLOX FERNs**, and **HARDY GRASSES**  
**KITCHEN HERBS** and **ROOTS**  
**RUTHERFORD PARK LAWN GRASS SEED**  
**AUTUMN BULBS**, Dutch, French and Japanese kinds  
**Interior and Exterior DECORATIVE PLANTS**, in a large variety  
**PLANT TUBS**, in all shapes and sizes. Ask for special list  
**VISITORS** to our nurseries are always welcome  
**SEND IN YOUR LISTS FOR QUOTATIONS**  
**Nurserymen, Florists and Planters  
RUTHERFORD, N. J.**

## SMALL STOCK FOR LINING OUT

The heavy sales of this small stock has reduced our supply considerably, but we still have quite an assortment to offer. Send for a copy of our revised list.

### Fruit Seeds and Seedlings

We have the following seedlings remaining:

3300 APPLES	2/16 to 3/16 in.
24600 MAHALEB CHERRY	5 to 8 m/m
20000 MAHALEB CHERRY	3 to 5 m/m
24150 MAZZARD CHERRY	5 to 8 m/m
5000 MAZZARD CHERRY	3 to 5 m/m
4000 FRENCH PEAR	5 to 6 m/m
4000 FRENCH PEAR	6 to 10 m/m
20000 FRENCH PEAR	3 to 5 m/m

Send for prices, advising quantities wanted. We also have a quantity of French Crab Apple Seed to offer. Ask for prices.

**WHOLESALE TRADE LIST.** Our Trade List for Spring 1913 is ready. If you have not received a copy send for one at once. It will be of interest to you.

**RAFFIA.** We offer various brands of Raffia representing the best in quality and price. Send for list.

### Thomas Meehan & Sons

Wholesale Nurserymen and Seedsmen  
DRESHER, PA.

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*OFFER A GENERAL ASSORTMENT  
OF NURSERY STOCK*

**Apple, Catalpa Speciosa Seedlings  
Shade and Ornamental Trees**

IN LARGE QUANTITY

WRITE FOR PRICES

### C. M. HOBBS & SONS

BRIDGEPORT, IND.

# Tree Protection

SCALINE will protect them all seasons of the year.

SCALINE is an oil and sulphur composition, a scalecide, insecticide and fungicide combined—three in one—and it will destroy San Jose, oyster shell, cottony maple, tulip scale, aphids, red spider, thrips, mealy bug and all sap sucking insects.

SCALINE is composed of a high grade petroleum oil and the properties of our fungicide Fungine, thus making it equally effective for the control of various fungi.

SCALINE is used at the strength of one part to twenty parts water for scale; one part to fifty parts for other sap sucking insects. It is readily soluble in water, requires no mixing, and containing no sediment can be applied through the finest spray nozzle.

SCALINE may be used as safely in the growing as in the dormant season. It is an all year round spraying material.

Gallon, \$1.50

Fifty gallons, \$37.50

Ten gallons, \$10

We believe that in SCALINE we have one of the best spraying materials on the market today for general spraying of trees, shrubs and hardy plants. We feel confident that a trial would make you a regular user of this product.

## Aphine Manufacturing Co.

M. C. EBEL, General Manager

Manufacturers of Agricultural Chemicals

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"APHINE"  
Insecticide

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Vermicide

# FOREST TREES FRUIT STOCKS

Shipments of over 200 Millions of  
Trees annually

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Please write for Catalogue and  
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Double Flowering Peaches  
Double Flowering Japan  
Cherries, Weeping Japan  
Cherries, Flowering Apples  
Asparagus, strong 2 years  
Large and complete assort-  
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WEST CHESTER, PA.

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finish of our

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printed or plain, strung or wired?



This stock is especially adapted to the most severe usage, being thoroughly waterproof & weather-proof. "Once used, always used."

Send for samples and prices. Our reference are the largest nursery men in the United States.

## The Denney Tag Co.

WEST CHESTER, PENNSYLVANIA

WE OFFER FOR SPRING 1913:

## Norway Maple Silver Maple and Carolina Poplar

IN CAR LOTS ALL SIZES  
GET OUR PRICES

The Greenbrier Nursery Co., Inc.  
GREENBRIER, TENNESSEE

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equal to any  
on the market

Small Fruit Plants our specialty for 25 years. **100,000 Transplanted Raspberry**, Blackberry and Dewberry plants, fine for critical retail trade.

Currant, Gooseberries, Grapes, Horseradish, Asparagus, Rhubarb, etc. Hardwood cuttings and layers in large quantities. See our wholesale list before placing your order.

**W. N. SCARFF**

NEW CARLISLE, :: OHIO

## Pan Handle Nurseries

WE OFFER A COMPLETE ASSORTMENT OF NURSERY STOCK CONSISTING OF

Apple	Poplar Carolina	Ampelopsis
Pear	Poplar Volga	Roses
Plum	Elm American	Evergreens
Cherry	Sycamores	California Privet
Peach	Mountain Ash	Buxus
Grape	Althea	Weeping Trees
Currant	Hydrangea	Catalpa Seedlings
Gooseberry	Barberries	Black Locust "
Small Fruits	Syringaeas	Fruit Tree "
Maple Norway	Clematis	Catalpa Speciosa Seed.
Maple Schwedlers	Honey Suckle	Etc., Etc., Etc.
Maple Silver	Wistaria	

Our stock is well grown and graded. Prices are such that it will pay to investigate. Come and see us or write.

**J. K. HENBY & SON**  
GREENFIELD, IND.

## Currants. Apple Trees Ornamental Trees Ornamental Shrubs

No better stock or finer assortment in the country.

*Prices are right*

Our Spring Trade List can be had for the asking.

**ARTHUR BRYANT & SON**  
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For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

**Dayton Fruit Tree Label Co.**  
South Canal St., Dayton, Ohio

## Ornamental Trees, Shrubs, Evergreens, Vines, Etc.

HIGH  
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LARGE  
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Correspondence solicited. Price list upon request.

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A Magazine of Trade News and Cultural Information for the NURSEYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

*Published Weekly*

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11 HAMILTON PLACE, BOSTON, MASS.



**400,000 Small Fruit Plants** in storage for early spring trade, 1913. Blackberry root-cutting and sucker plants; Red, Purple and Black Raspberry; Downing Gooseberry, one year, No. 1; Dewberry; Asparagus two and three year roots; Rhubarb one, two and three year whole roots and divided. Trade List ready Feb. 1st. Let me quote you on your list of wants.

**P. D. BERRY, Dayton, Ohio**

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Arbor Vitae  
Austrian Pine  
Black Hill Spruce  
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All sizes

SPECIAL QUOTATIONS

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# The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

Vol. XXI.

ROCHESTER, N. Y., MARCH, 1913

No. 3

## GROWING FRUIT STOCKS IN THE UNITED STATES

Many attempts have been made in the last twenty-five years or more, to grow a full line of fruit stocks from seed, but with the exception of apple, the efforts have not as a rule proven very successful.

There have been, however, and still are some exceptions indicating that if a systematic effort was exerted, this country could produce all the fruit stocks required for its own consumption.

The Milton Nursery Co., Milton, Oregon have had exceptionally good stands of Mazzard Cherry, and for years

in the latter state,—and it is being done every year, but only in sufficient quantities to supply the requirements of the grower and not for sale. If they can be grown profitably for the growers own use, why not in large quantities for general consumption?

Myrobolan plums have been produced in small quantities in California, but apparently no attempt has been made to grow them extensively, yet it should be no more difficult to grow them successfully than Peach, Cherry or any hard shelled seed. In Minnesota quite large quantities of native



View of a block of Seedling Mahaleb Cherry, grown by Bates Bros. Floral, Kansas. Summer of 1902.

have grown all the Mazzard stocks required for their own use. Some three years ago the writer saw on their grounds quite a large block of these seedlings, and Mr. Miller told him that they would average at the rate of over fifty thousand stocks to the bushel of seed planted. The stocks were strong, clean, vigorous and perfectly free of Aphis or any other insect or disease. Other nurserymen in Oregon, Washington and California have equally as good stands, and the practice of growing Mazzard Cherry on the Pacific Coast is of long standing. Why cannot these Coast States grow sufficient Mazzard Cherry to supply the entire country, and at a profit?

What we commonly call French Pear can also be successfully raised in Oregon and Washington, and particularly

plum stocks are grown. No doubt in this vast country, where we have every climatic condition and character of soil there must be some particular section just suited to the germination and production of good stands of Myrobolan Plum.

Upwards of twenty-five years ago, Geo. Peters of Troy, Ohio experimented with growing Mahaleb Cherry and finally succeeded in producing heavy stands of Mahaleb Cherry. So successful was he that his plantings amounted to twenty-five to thirty-five bushels of seed per year, and in those days, clean Mahaleb Cherry seed was worth twenty-five dollars per bushel. Other nurserymen also were successful in their plantings of from one to five bushels per year. James B. Wild & Co., Sarcoxie, Mo., were also successful

growers of these stocks, and quite a few others of the old time nurserymen, but up to recently the production of these home grown Mahalebs greatly diminished.

The Bates Brothers, Floral, Kansas took up the growing of Mahaleb Cherry seedlings a few years back, and have produced many good stands of stocks. The illustration shows a block of these seedlings grown last summer. Three bushels of seed were planted, yielding exactly 304,700 seedlings or slightly over 100,000 stocks per bushel. Why cannot the United States produce its own Mahaleb Cherry instead of depending upon France for them?

Scattering lots of Manetti Roses have been grown in the Southern States. The Manetti is raised from cuttings. Some of the Southern nurserymen are growing Baltimore Belle, Queen of the Prairie, Crimson Rambler and some Hybrid Roses from hard wood cuttings and get good big stands too. The Manetti rose is no more difficult to grow than any of those mentioned, yet no one has undertaken to grow them, at least not in sufficient quantities to offer them to the trade. Why not?

What is the answer? Are our American nurserymen not alive to the importance and advantages of producing their own "raw material" or are they content to remain in the old rut and let France do it for them? No one doubts but that our nurserymen are equal to any emergency and it is a question of great consideration right at this time.

The present Federal laws are making the importation of fruit stocks and other nursery stock more difficult every year. If the Federal Board of Horticulture should at any time, and it is within their power, quarantine the fruit stock producing section of France, this country would be hopelessly at their mercy, and the supply of stocks, our "raw material" would be completely cut off. This is not a desirable condition to face, yet it is an unfortunate fact.

Cheap labor enables France to produce these stocks at a low price, and no doubt this is one of the causes for the non-production of our own seedlings. The present tariff on fruit stocks still leaves room to grow our own seedlings at a small profit, but not sufficient perhaps to warrant their production on an extensive scale. The present tariff if retained in the proposed new tariff bill no doubt will stimulate the growing of our own seedlings, but a reduction or entire elimination of duties would effectually kill any further attempts to produce our own requirements in this line.

### NEEDS OF THE LANDSCAPE ARCHITECT

Dear Sir:

I have your circular letter of the 9th inst., asking certain questions about nursery stock. Replying to these questions in their order stated, I would say:

First, as to species, I find most difficulty in being able to secure hard wooded trees and shrubs, which material is far superior for general use and permanent plantations.

Second, I prefer evergreens grown in an open and natural manner rather than sheared specimens, for all ordinary purposes. There is, however, a special use for specimens trimmed in formal shapes such as bay trees in standards and pyramids. This class could be considerably extended to

cover our native Red Cedar and other evergreens, which would supply a useful type which would be hardy and thus of great value for formal settings where expense and trouble of planting in tubs could be obviated.

Third, as to native plants, there is a certain class of hard wooded small trees which are difficult to obtain except in small sizes, such as Thorns, Hollies, etc.

Fourth, regarding sizes of trees, shrubs, etc., I prefer to use well-developed and well-grown material where the owner is willing, of the largest sizes now offered by nurserymen. The great difficulty with this kind of planting is to secure uniformity in a list having a considerable number of different kinds.

I trust these replies will be of some value, as I am a great believer in closer co-operation between nurserymen and landscape architects on just such questions as you have brought up.

Yours very truly,

CHARLES N. LOWRIE.

Answer to your favor of January 9th has been delayed by the writer's absence from the city. We are not always able to procure the right kind of nursery stock. One of our chief difficulties is caused by the slowness of freight, and we find that there are few nurserymen who understand packing. We prefer thick bushy evergreens but do not wish to have them sheared. There are many native plants that should receive more attention from the nurserymen; among them—Sassafras, Pepperidge trees, the various Oaks, the Honey Locust, the Kentucky Coffee tree, our native Thorns and Crab-apples, and many of our wild herbaceous plants.

Yours truly,

O. C. SIMONDS & Co.,

Per O. C. SIMONDS.

### THE ROSE SHOW AT BOSKOOP

We have received the following communication regarding the Great Rose Show which will be held in Boskoop, Holland, July 1913.

Again the Government has shown his interest in this enterprise as the Exposition will be held under the patronage of His Excellency the Minister of Agriculture, Industry and Commerce.

The committee has been obliged to greatly extend the grounds of the Exposition, this proving to be necessary to meet the wishes of the very large number of exhibitors. Around the Rosarium, which will cover about an acre will be built a "Pergola" 600 feet long, this pergola alone will require 3000 Climbing roses, which have already been grown in pots for this purpose. In the rosarium will be plants grown in pots for this purpose. In the Rosarium will be placed thousands of roses, bush and standard form; to keep the grounds during the time the Exposition will be held in good shape, there will be a surplus of 50,000 bush roses and 6000 standard roses in 300 varieties, all grown in pots. In the background of the rosarium will be erected an Italian Flora Temple with side wings, 120 feet broad, 15 high feet, one and the other promising to make a brilliant effect.

The programme for cut roses is ready and will be mailed in a few days, the competition for No. 1 of the programme (new roses not yet in commerce) will be open also for growers outside of Boskoop, the committee therefore advises those who have good novelties, to apply for a copy of the programme. Several gold medals will be at disposition for this class. The best known rose growers of Holland and other countries will be invited to act as members of the Jury.

### PROPOSED NEW LAW FOR NEW YORK STATE

Int. No. 293. In Assembly February 10, 1913. An Act. By Mr. Vert.

To amend the agricultural law, in relation to the sale of fruit bearing trees.

SECTION 1. Article II of Chapter nine of the laws of nineteen hundred and nine, entitled "An Act in relation to agriculture, constituting chapter one of the consolidated laws," is hereby amended by adding at the end thereof a new section, to be section two hundred and sixty-three, to read as follows:

SEC. 263. SALE OF FRUIT BEARING TREES. Every person, firm or corporation, who shall sell any fruit bearing trees, shall attach to each tree before delivery a tag correctly stating the name and variety of such tree, as classified by the state commissioner of agriculture, and such trees shall be so marked and tagged when delivered to the purchaser.

Every sale of fruit bearing tree or trees shall be made by a contract in writing stating the name and variety as classified by the state commissioner of agriculture and signed by the person, firm or corporation making such sale, or their duly authorized agent, and if such fruit bearing tree or trees are not of the name or kind specified in such contract, the person, firm or corporation shall be liable for all damages resulting therefrom and the penalty of five dollars for every tree, which has been received by the purchaser and planted for growth, which is not of the name and variety specified in such contract. Such damages and penalty may be recovered in a civil action by the purchaser of such fruit bearing trees. All contracts and agreements contrary to the provisions of this section shall be void.

SEC. 2 This act shall take effect immediately.

NOTE: This bill referred to Committee on Agriculture.

### THE CONNECTICUT NURSERYMEN'S ASSOCIATION

The annual meeting of the Connecticut Nurserymen's Association was held in the offices of the State Entomologist, Agricultural Experiment Station, New Haven, February 12th. Meeting was called to order at 10:30 A. M. President McCartney in the chair. Election of officers resulted as follows:

President, T. E. Burroughs, Deep River, Conn.; vice-president, Stephen Hoyt, New Canaan, Conn.; secretary, F. L. Thomas, Manchester, Conn.; treasurer, W. W. Hunt, Hartford, Conn.; Legislative committee, John Barnes, chairman, Yalesville, Conn.; Executive committee, C. R. Burr, chairman, Manchester, Conn.; Entertainment committee, Paul Hubbard, chairman, Bristol, Conn.

The Association was found to be in a flourishing condition both financially and otherwise.

Mr. John Barnes spoke on "Storage Cellars and Storage of Fruit Trees," which was followed by discussion.

Mr. C. R. Burr addressed the meeting on "Replacement of Nursery Stock, it's Evils and Remedy."

Dr. Britton, State Entomologist, spoke at some length on the subject of the General Insect Pest law, providing for orchard and nursery inspection which was followed by discussion. The Legislative committee was directed to take such steps as possible to do away with, at least, as much of the objectionable parts of such bill as possible.

The subject of destruction of young fruit trees both in the nursery rows and after having been planted by farmers by the increasing number of deer each year in the state of Connecticut was taken up and discussed and the Legislative committee also instructed to endeavor to put through some bill providing for at least a short open season for the killing of deer in our state, in order to protect not only themselves but their customers from heavy losses.

The Association adjourned at 1 P. M. and proceeded to enjoy a first-class dinner at the Oneco.

Afternoon session consisted of a very interesting address by Prof. E. H. Jenkins of the Agricultural Experiment Station, in "Fertilizers," followed by a lecture on "Japan and Japanese Gardens," by E. F. Coe, Mr. Coe having personally secured many of the views while travelling in Japan recently. Meeting adjourned about 5 o'clock.

FRANK L. THOMAS,  
Secretary.

### ANNUAL MEETING OF THE OHIO NURSERYMEN'S ASSOCIATION

The sixth annual convention of the Ohio Nurserymen's Association was held at Zanesville, Ohio, January 22d, 1913. About 25 of the leading nurserymen of the state were in attendance.

In his address, President W. N. Scarff stated that the Association owed a great debt of gratitude to President J. W. McNary, whose death was recently announced, for his work in the interests of the Association.

The nurserymen were welcomed by S. R. Moore of Zanesville, who extended an invitation to the members to visit the various manufacturing plants in his town.

The reports from members showed that nursery stock is in excellent condition at this time. Prof. N. E. Shaw stated that there were only about one half as many nurseries inspected in the state during the last year as were formerly, this being doubtless due to the new law which required nurserymen to pay an inspection fee.

Papers were read by H. Kohankie, W. F. Bohlender, A. R. Pickett, T. B. West and others.

J. H. Dayton of Painesville, Ohio was appointed to present an invitation, at the Portland convention of the American Association of Nurserymen, to hold the next annual convention at Cleveland.

The following officers were elected: President, W. N. Scarff, New Carlisle; secretary, W. B. Cole, Painesville; treasurer, A. R. Pickett, Clyde; executive committee, Robert George, A. R. Dinsmore, T. B. West, W. F. Bohlender and J. W. Gaines.



# NUT GROWING IN THE OHIO VALLEY AND ITS PROMISE FOR THE FUTURE

By W. C. Reed, Vincennes, Ind., Read Before the State Horticultural Meeting, Henderson, Kentucky

Nut growing in the Ohio Valley, at present is confined exclusively to seedling trees, which have sprung up in groves or separately. In the past there were many native nut trees growing in a wild state in the broad expanse of the forests, which provided large quantities of food for the Indian and which provided food and luxury for the white man afterwards as long as these trees were spared from destruction. So indifferent, careless and negligent have been the owners of large numbers of these delicious nut bearing trees that they have allowed them to be felled in great numbers preparatory for the plow and cultivation of the soil, when the crops from the trees felled were worth many times over the agricultural crops.

The native nuts of the Ohio Valley are the Black Walnut, the Butternut, the Hazlenut, the Beechnut, the Hickories, the Chestnut and the Pecan. The Pecan will be dealt with more in detail in this article because it gives better promise of rewards and more is known concerning its culture.

Before discussing the Pecan, I wish to mention two other promising nuts; the Chestnut and the Persian or English Walnut. The Chestnut is rapidly gaining attention throughout the entire country, owing to the introduction of trees which are perfectly hardy and bear large nuts which are equal in flavor and quality to the seedling sweet Chestnut. Chestnut culture is now receiving considerable attention and is being engaged in, with profit when intelligently conducted. The demand for the larger nuts has stimulated their production and trees are being widely grown. Their hardiness and adaptability to different climates commend them for general planting. It thrives best on high, well drained soil. Another good feature of the Chestnut is, that it can be planted on rough waste land or steep hillsides that are unfit for agricultural purposes, or the growing of other nut trees, thus deriving a large revenue from what was before, total waste land.

For several years men in different parts of the country have been experimenting with Persian or English Walnut with a high degree of success and find that they cannot only be grown in California but in the middle and Eastern states as well. They have varieties already which produce under our Eastern conditions, fruit equal to the best California nuts, in size and appearance and superior to the California product in quality and flavor. These trees are found bearing in Pennsylvania, Ohio, New York, Michigan, Indiana and portions of New Jersey, Maryland and Delaware. In some of the valleys of California the trees are said to be more or less injured by temperatures of 18 to 22 degrees above zero, while hardy varieties show little or no injury to the trees after being exposed to temperatures of 18 to 22 degrees below zero in Pennsylvania. Walnut trees require about the same care as apple trees as regards cultivation, mulching and fertilizing but the trees should be

planted not less than 40 feet apart. If planted in orchard form the land between the trees may be utilized for several years for the growing of such truck or field crops as are suitable for inter-cropping in an orchard or "fillers" of quick bearing fruit trees or small fruits may be planted between the walnut trees. These should be removed when the nut trees need all the room. By this time the trees should be producing profitable crops so that the revenue from the "fillers" will not be necessary to carry the expense of caring for the grove. Persian Walnut will grow successfully on land that is suitable for apple trees and will thrive and do well as far north as the peach belt, which extends up into Michigan. Seedling Persian Walnuts do not reproduce in kind, vary so much in vigor, hardiness and productiveness that they cannot be depended upon with any degree of certainty. All English Walnuts should be budded on the native Black Walnut which makes the Persian types more vigorous, adapt themselves to a wider range of soils and ripen their wood earlier and better in the fall. This would stand, without injury, very low temperature. The Persian Walnut is not a native of United States and as yet not grown extensively in the Ohio Valley, but I can see no reason, that in a few years that it will not be grown as extensively as in California.

It is probable that within the area under discussion, in the future greater attention will be paid to the Pecan and Walnut than any other nuts, owing to their adaptability to the soil and favorable climate.

It is true but probably not generally known that the Pecan never grew as a native nut in any other part of the world than a small part of the United States. It grew originally as a forest tree in the Mississippi Valley and some of its tributaries, and in the valleys of a few rivers in Texas. It grew as far north on the Mississippi as Davenport, Iowa. In the Wabash River Valley it grew as far north as some forty miles above Terre Haute in Indiana. In the Ohio river valley it grew as far up as Cincinnati. From these points it grew in Southeastern Iowa, eastern half of Missouri, Southern Illinois, Southern Indiana, Western parts of Kentucky and Tennessee. In a very large part of Arkansas, Mississippi, Louisiana and in the Southeast half of Texas. It is unknown in any other part of the world except as transplanted by man.

There are few acres of tillable land in the United States that will not yield \$100 worth of nuts to the acre per year, with less care than would be required for almost any other crop. Special acres under special cultivation and with special kinds of nuts, are at present yielding in the neighborhood of a thousand dollars profit per year. At present the demand is so in advance of the supply that we import many millions of dollars worth of nuts annually.

The possibilities of nut growing are unlimited, especially the Pecan, as it can only be grown on a small territory and

this territory has the whole world to supply. The markets of Europe want Pecans, willing to pay a big price and yet are unable to obtain any. At present we do not grow near enough for our own use. In 1900 we imported two million, nine hundred thousand dollars worth of nuts and in 1911, we imported fourteen and one-half million dollars worth. The American public is learning the value of nuts as food and, which already occupy a prominent place in the American dietary.

We have unexcelled advantages over California in the marketing of Persian Walnuts. Instead of having to ship our product across the continent and being at the mercy of the railroads, we have the finest markets in the world right at our doors. Our season of ripening is a month earlier than in California, thereby placing our nuts on the market 30 days before the California nuts and 60 days before the imported nut, obtaining a much higher price for our product.

The beautiful Walnut, the stately Pecan, and the sturdy shag-bark with their dense, waxy, dark green foliage can be made to replace South and North, the millions of useless Poplar, Willows and other bunches of leaves which please the eye but render no valuable annual or final returns. The chief reason why this has not been done is because the people have not thought about it.

The varieties desirable for northern planting are sometimes called the "Indiana Group," while some of the very finest of the Northern pecans have originated in Indiana, they could just as easily have been called the Ohio River Group or some other name applying to that section of the Ohio Valley of which Evansville, Indiana, is the center and extending about fifty miles into Kentucky, Illinois and Indiana. In this territory there are many thousands of wild Pecan trees; and after an investigation extending through a number of years, there have been selected from these various wild groves, a few trees from which it has been deemed desirable to propagate. In this connection I want to mention the valuable work that has been done along this line by Mason J. Niblack of Vincennes, Indiana, and Thomas P. Littlepage of Boonville, Indiana, and Washington, D. C. These men, with the assistance of others, throughout Indiana, have, for several years been making investigations of these Pecans with view of determining the most desirable varieties to propagate. It has been my privilege to have the benefit of the information gathered by these gentlemen, which, added to my own experience, has given me a fairly comprehensive view of the desirable nuts in that section.

If the farmers and orchardists were to put out ten to twenty acres of good Pecans on their land they would soon be surprised to find that this small piece of land would be worth more money than all the rest of their farm. Ten acres of Pecan trees can be cultivated at less expense annually than ten acres of corn and if the grove consists of the right varieties and has been properly cultivated, it will be worth not less than \$500, per acre in ten years. In fact I do not know of a single grove of Pecan trees in the United States of the right varieties that has been properly cultivated that can be bought for \$500 per acre at ten years of age, yet the principal reason that this very thing has not been done by

the farmers throughout the Pecan belt is because they have not had sufficient information on the subject and have had no means of acquiring it and most important there were no trees to be had.

I want to impress upon every one the absolute necessity of planting nut trees that are budded or grafted on our native seedling stock. Never plant root grafted trees or Southern varieties as these have been tested throughout the North and invariably kill back to the ground each winter. Budded and grafted nut trees bear very much younger than the seedlings. I also want to discourage the planting of seedlings, as they never reproduce in kind and productiveness, especially the Pecan. Statistics show that only 40 to 50 per cent of the seedlings Pecans ever bear fruit. An example of this may be found at New Harmony, Indiana, where Mr. Arthur Dransfield planted a grove of 300 seedling Pecans, of this number only one tree bears consecutive crops of good nuts. The grove is now 27 years old and only contains 113 trees. The others were all cut out. The majority never bore fruit at all.

Promoters attack their quarry with a two edged sword; one edge is what they say, the other what they leave unsaid; and both edges are often keen. What the promoter does not say it is absolutely necessary to find out. Deductions from experience in general and from knowledge of the business in particular will help and when these favor further investigation, there are two essentials for a wise decision: First, a study of the records of the promoters and second, a personal examination of the property. Your legitimate and well-born, well-brought up promotion, fathered by ability and mothered by honesty, it is your problem to recognize, if this is what you are looking for, and to avoid the low born trickster. No one can tell you how to do this any more than he can tell you an easy way to graft Hickories.

It is well to emphasize the fact right here that nut trees purchased from nurseries cannot be purchased at a low price. The difficulty of propagating and getting them ready to transplant is too great for them to be sold at prices to compare with other fruit trees. But taking into consideration the few planted to the acre and the revenue derived from inter-cropping or fillers of quick bearing fruit trees or small fruits the cost is comparatively low.

Fruit growing on its face presents ideal charms but study shows such an alarming array of bugs and blights, methods of pruning, armaments of sprays, unholy combinations of railroads and middlemen, that the heart grows faint. When, therefore, one reads that nut growing promises a degree of freedom from the spectres, the heart grows warm again.

The question comes up, Will the Pecan produce as well here as in the South, where they are planting so many commercial orchards? The Pecan is native of the alluvial river bottoms, while most of the commercial orchards have been planted on the pine upland, a large portion of which is very poor land and must be fertilized heavy each year. It is also a fact that some of the largest Pecan plantings are several hundred miles away from their native heath. In the Ohio Valley we have more favorable conditions because most of the land is very fertile and requires little or no fertilizing.

The largest native tract of Pecan timber in the world is the Major Grove at the mouth of Green river in Henderson County, Kentucky. This grove is hundreds of acres in extent and is solid Pecan timber except a few soft maple found in the sloughs. Some of the trees are 5 and 6 feet in diameter and 150 feet high. Many of the seedling trees bear from 100 to 400 pounds of nuts annually even under the forest condition, these yields produce a handsome revenue. We may expect them to do better when budded trees are set in orchard form and cultivated.

There are many wild Pecan trees that if saved and top-worked by budding and grafting to the better varieties would give large returns in a very short time.

I would urge every land owner to plant at least a few nut trees, selecting those best adapted to his locality and soil, plant so that your own family may be supplied with the cheapest of all foods, a food that is put up in tablet form so to speak. One that does not have to be preserved but will keep for many months without any special care.

#### TRANSPLANTING

Pecan trees should not be transplanted until they are well matured in the fall. Early winter or early spring is perhaps the best time. For spring planting it is better to dig the trees in the fall, trim the roots ready for transplanting and heal them in carefully covering almost the entire top, the roots will calous and be ready for growth when planted; never expose a Pecan tree to the wind or sun, take out one tree at a time and set it, being careful to tamp the soil very solid, much like you would in setting a fence post.

It is well to use dynamite to prepare the holes and loosen up the subsoil, allowing twenty-four hours for the fumes to evaporate before setting the tree.

#### PROPAGATING

The writer has given very careful study to the propagation of the Northern Pecan for the past five years, having tried all methods of budding and grafting. The root grafted trees have usually winter-killed while the budded trees have usually made a strong vigorous growth and withstood the past winter even at 20 degrees below zero.

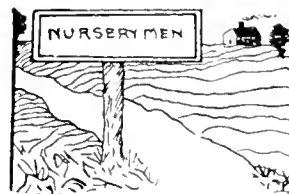
The writer believes in taking his own medicine and at the present time is preparing eight acres of land to be planted to Pecans and English Walnuts; this land is rather rough for farm crops; the nut trees will be set fifty feet apart with Cherry trees planted between.

I believe the future is full of promise and will pay handsome returns to those who plant nut trees of the hardy northern varieties and give them proper attention. Would much rather have a nut orchard in the North under my own personal supervision than one in the South that had to be farmed by proxy.

#### NEW ENGLAND NURSERYMEN'S ASSOCIATION

The Annual Meeting of the New England Nurserymen's Association was held in Horticultural Hall, Worcester, Mass., on Tuesday and Wednesday, February 25th and 26th. The programme included talks and discussions by Dr. W. E. Britton, State Entomologist of Conn., A. E. Stone, State Nursery Inspector of R. I., Walter C. O'Kane, State Agent of New Hampshire and Dr. W. S. Regan, Inspector in Mass. The new Federal Law on Inspection and Quarantine and the rules and regulations of the Federal Horticultural Board were discussed at length.

Many interesting papers were read by prominent New England nurserymen. A full account of the meeting will be given in the April number of THE NATIONAL NURSERYMAN.



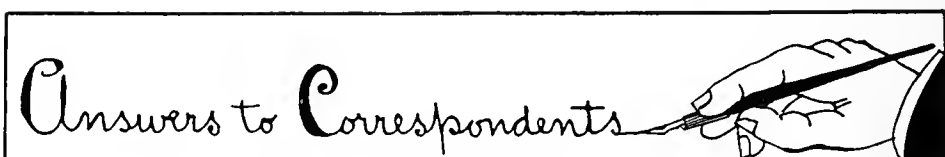
## Business Movements.

#### A NEW NURSERY

George W. Weaver, who for the past three years has been connected with the Waxahachie Nursery Company at Tyler, Texas, is now establishing a nursery of his own under the name of George W. Weaver & Company at the little town of Swan, in Smith County, Texas, in the midst of the greatest fruit and truck growing section in the southwest. He will grow a general line of nursery stock although his specialties will be Figs, Mulberries, Grapes, Roses, California Privet, Japan Persimmon and Plum trees on Marianna Plum stock.

R. R. Harris will discontinue his office at Harrisville, West Virginia, as soon as spring shipments are finished, and will move to Greenbrier, Tenn., where he has purchased 112 acres of choice nursery land at that place which is just out of Nashville. He has 150,000 Apple which are one year graft; 100,000 apple seedlings budded, 100,000 dormant Peach buds, planted 200 bushels of Peach seed last October and will plant 150,000 apple grafts and 200,000 Apple seedlings for budding purposes, beside almost 40,000 Pear, Plum and Cherries, beside a fair planting of ornamentals, shrubbery and roses.

The business at Greenbrier will be under the personal supervision of Mr. Harris and sons. The business will be conducted under the name of the Greenbrier Nursery Co., Inc., and is incorporated for \$30,000. He intends to do a wholesale and retail business. It is the opinion of nurserymen in the vicinity that the locality is as good as can be found.



Please answer the following questions in the columns of your paper.

Why is the Holly not grown by nurserymen?

Is it hard to grow or hard to transplant, or is it of no value as an ornamental tree?

I notice that hardly any of the nurserymen have it listed in their catalogues.

I am experimenting with about a dozen small ones and would be glad to have all the information on the propagation and care of them that you can give me.

S. S. S.

We are inclined to think holly is not more generally grown because it is a little bit difficult to handle. There is no question but what it is one of the most ornamental trees we have, and if there was good stock on the market, it would find a ready sale, as it is one of the broad leaf evergreens of which there is never sufficient supply.

The English holly is used very extensively in that country. In fact, it is one of the leading evergreens, being planted for hedges, ornamental specimens and endorsed very highly for all kinds of ornamental planting. There are a number of very fine varieties, including gold and silver variegations and an



endless variety of form. This of itself seems to point to a good future for its ally the American holly, *Ilex opaca*. While perhaps the American holly is not quite so attractive looking as the English, it is still very beautiful, and when the nurseryman does eventually understand how to handle it, it will no doubt soon be improved.

As you are going to experiment with it, you will find it best rather to start with small plants, and when planting in the early spring either cut them well back or else entirely strip the leaves. Perhaps, if they are very small plants the latter course would be the best, but if they are three or four feet high it would be better to cut them down almost to the ground and try and get a new growth started from near the ground. After this it is a ease of proper transplanting and handling. It is practically useless to try and lift a good sized tree from the woods with a view of transplanting it into the nursery. Failure invariably results. If you can grow some good American holly you will doubtless find a ready market. Propagation is by seed which does not germinate until the second year.

We would like to ask, what are the different advantages of budding or grafting apples?

A. B. A. NURSERY CO.

Scion grafting is usually the method used to propagate apples. Perhaps the reason is, with this method the work can be done in winter very successfully. The stocks are dug up in the fall, stored in cellars and the scions or grafts can also be cut and stored. Thus, the work can then proceed all through the winter without any interference from the weather. It gives a much more extended time at which it can be done, as when the grafted plants are properly cared for they will keep in good condition until they can be planted out in the nursery in the early spring.

Bud grafting or budding is more generally practiced with the stone fruits, Plums, Cherries and Peaches. This method is practiced as in the case of Peaches, the buds are put on in July or August and in the south, we believe as early as June, or just whenever the buds are ready and the stocks in good condition for working. Both have their own supporters, but we believe the scion grafting is the most practical and adaptable method for Apples.

The names of some good books treating on the subject of Landscape Gardening are as follows:

Landscape Gardening by Samuel Parsons, Jr., published by G. P. Putnam's Sons, 27 West 23d St., New York; What England can tell us about Gardening by Wilhelm Miller, published by Doubleday Page & Co., Garden City, L. I., N. Y.; The Landscape Gardener by Grace Tabor, published by McBride Nast & Co., 449 4th Ave., New York; The Landscape Beautiful by Frank A. Waugh, published by Orange Judd Co., 439 Lafayette Street, New York.

Landscape gardening is such a wide subject, that it cannot be treated fully either in one volume or a set of volumes. You will, however, find all the above books worthy of consideration.

Do large nurseries still trench out for planting seedlings and root cuttings by man labor or have they machines for this purpose?

A. B. AUSTIN NURSERY CO.

Most all the progressive and up-to-date nurserymen use Trenchers and Firmers for setting out their grafts and young stock, though some are not able to use these machines if their ground is of a character to prevent the proper working of the machines, but where the soils are suitable, these machines are certainly labor savers and plants the stock equally as well as by any other method.

The Planters and Firmers shown by the I. E. Ilgenfritz Company, Monroe, Michigan, are probably the best ones on the market. There are two machines, one which opens a trench, the other for pressing the earth about the roots after the graft or cutting is placed in the trench. You will see an advertisement of the Ilgenfritz Company in the January number in which they show illustrations of this machine. If you will write to them, they will no doubt be glad to send you further information on the subject.

#### INTERESTED EXHIBITORS AT THE COMING CONVENTION TAKE NOTICE

I have recently been appointed chairman of the Exhibit committee of the American Association of Nurserymen, also of the joint convention of the Pacific Coast Association, which meets at the same time.

I would be pleased to have all the eastern parties who desire to make exhibits at this convention send word to me at as early a date as possible what they intend to exhibit, and about the amount of their exhibits. We hope to make this convention the largest and best one ever held by the American Association and we need the hearty cooperation of all to insure success.

Oreono, Oregon.

FRANK W. POWER.

#### MEXICAN FRUIT FLY

AMENDMENT NO. 1 TO NOTICE OF QUARANTINE NO. 5, (FOREIGN)

The fact has been determined by the Secretary of Agriculture that the Mexican fruit fly (*Trypeta ludens*) infests grapefruit in the Republic of Mexico.

Now, therefore, I, James Wilson, Secretary of Agriculture, under authority conferred by section 7 of the act approved August 20, 1912, known as "The Plant Quarantine Act," do hereby prohibit the importation and entry into the United States from the Republic of Mexico, for all purposes, of the grapefruit and its horticultural varieties.

Notice of Quarantine No. 5 is amended accordingly.

Done at Washington this 8th day of February, 1913.

Witness my hand and the seal of the United States Department of Agriculture.

JAMES WILSON,  
Secretary of Agriculture.

We have had a year's trial of your paper and consider it well worth the cost, so kindly continue us as subscribers.

S. & M.



# MINUTES OF THE SECOND ANNUAL MEETING OF THE MISSISSIPPI NURSERYMEN'S ASSOCIATION

Held at Gulfport, Mississippi, October 31, 1912

The meeting was called to order at 1:30 P. M. by President J. R. Woodham. The minutes of the 1911 meeting at Meridian were read and adopted. The old officers were unanimously re-elected for another year. These officers are: J. R. Woodham, Newton, president; W. A. Woods, Tomnolen, vice-president; and R. W. Harned, Agricultural College, secretary-treasurer.

The motion to make Professors A. B. McKay and R. W. Harned honorary members of this association was unanimously passed.

President Woodham gave the president's annual address.

Hon. Sam Dixon, chief nursery inspector of Texas, was present and gave us a most interesting talk upon the Texas inspection laws and the way they are enforced in that state.

The following motion was made by Mr. Ball, seconded by Mr. Beyer and passed unanimously: "Whereas, the Mississippi Nurserymen's Association having investigated the nursery inspection laws of the various states, has decided that Texas has the best nursery inspection laws, therefore, it is our opinion that a similar law, with necessary amendments to meet Mississippi conditions, should be passed in this state, and we earnestly recommend that our legislature pass the same at its next meeting."

Upon motion of Mr. Ball, Professors McKay and Harned were appointed a committee to draft a constitution for the association and to report at the next annual meeting. Upon motion by Mr. Rogers, the name of Mr. Ball was added to this committee.

Mr. Brodie made a plea for some arrangement by which the nursery inspection work could be done earlier in the season.

The Secretary-treasurer made his annual statement in regard to the financial condition of the association. This report was adopted.

After some discussion it was decided to hold the next annual meeting at the Mississippi A. & M. College at Storkville during the week that the annual Farmers' Round-up Institute is meeting, during the latter part of the summer of 1913. The secretary was requested to notify members of the exact date. It is quite likely that an extra meeting will be held at Jackson in the fall of 1913 during the week of the State Fair. Details in regard to this meeting will be decided upon at the regular meeting of the A. & M. College.

The secretary-treasurer presented the expense account of President J. R. Woodham. These expenses consisted of printing, postage, and travelling expenses in connection with his efforts to have the legislature make an appropriation for nursery and orchard inspection work in this state. A motion was made, seconded and unanimously passed that Mr. Woodham be reimbursed from the funds of the Association.

The secretary was requested to send copies of the minutes to all nurserymen of the state, to urge all members to pay

their annual dues promptly and to invite any nurserymen who are not members to join our Association at once

R. W. HARNED,  
Secretary-Treasurer.

For the benefit of the nurserymen who were unable to be present, the secretary wants to say that he believes that all who attended this meeting felt fully repaid for the time and money that it took. Several of the members stated this fact to the secretary. Most of us enjoyed attending the sessions of the National Nut Growers Association that met at the same time, these sessions lasted three days. We also were hospitably entertained at the Gulf Coast Fair and Exhibition. The nurserymen from the interior of the state took the opportunity of visiting some of the Gulf Coast nurseries and Pecan groves.

Among those present at the Gulfport meeting were the following: A. C. Ball, Mantee, Webster County; Theo. Bechtel, Ocean Springs, Jackson County; James Brodie and son, Biloxi, Harrison County; W. A. Cox, Biloxi, Harrison County; C. Forkert, Ocean Springs, Jackson County; J. D. Alexander and V. L. Beyer of the Mississippi Farms Company, Wiggins, Harrison County; J. R. Woodham, Newton, Newton County; W. A. Woods, Tomnolen, Webster County; W. C. Rogers, Toombsville, Lauderdale County; T. Niyona and D. Cunningham, of the Siabara Nurseries, Big Point, Jackson County; A. B. McKay and R. W. Harned of the A. & M. College, Agricultural College, Oktibbeha County; Hon. Sam Dixon, Chief Nursery Inspector of Texas, Austin, Texas; and several other visitors.

A number of other Mississippi nurserymen were present in Gulfport but at the time of the meeting, they were busy with matters concerning the Fair, or entertaining delegates to the Nut Growers meeting and were not able to be present; among the number were Mrs. W. R. Stuart of Ocean Springs, C. E. Pabst of Ocean Springs, and Frank H. Lewis of Pascagoula.

We were rushed for time and did not do as much at this meeting as most of us had planned. Next summer we will have plenty of time to do our work. We hope to have an interesting program and every nurseryman should begin to plan now to attend the meeting next summer.

NEW YORK STATE STATION, Geneva, W. H. Jordan, Director.  
Crown Rot of Fruit Trees: Field Studies. By J. G. Grossenbacher. (Technical Bulletin 23, pp. 3-59, pls. 23.)

Field studies in different orchards of the State from 1909 to 1912 to determine the nature and causes of crown rot and the relation of environmental conditions and varieties to the occurrence of the disease are reported. Investigations on the subject by others are reviewed.



From the U.S.D. <sup>OF</sup> A.

The Department of Agriculture is getting ready to fill requests for the basket willow cuttings grown last year on its experimental farm at Arlington, Va. Distribution of these cuttings takes place early in March each spring, to farmers and others who wish to make trials of basket willow on lands too wet for other crops. From 50 to 100 cuttings are given each person.

The distribution is not a mere giving away of Government material to persons who desire to get something free; because it is required that each recipient of cuttings shall make a report of the treatment given and the results obtained. Several select varieties are included in each set that is distributed, and the aim is to secure information as to the best variety for each locality, since no one kind can be relied upon to yield maximum results over a wide range of territory.

In the basket willow investigations carried on at the Arlington Farm, Arlington, Va., and at Ames, Iowa, by the Forest Service, particular attention has been given to the development of American species for basket making purposes. The European species now commonly used have never proved themselves entirely adapted to American conditions and are as a rule less thrifty than the native species. At present there is at Arlington a willow garden containing nearly 500 lots gathered from all parts of the country and representing practically every species and variety found in the United States and Canada.

A system of selection which has been carried on for several years is already indicating which strains show the best basket willow characteristics for American conditions.

### GOVERNMENT FREE SEED DISTRIBUTION

The annual fight to abolish the Government free distribution of seeds is on again and something of interest may develop this time. Two resolutions offered by Senator Kenyon have passed the Senate, calling on the Agricultural Department for information as to the cost of the seed distribution, and on the Post Office Department for information as to the cost of the government of franking out free seeds.

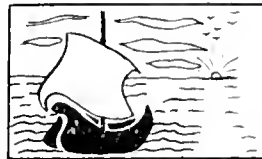
It is the intention of the opponents of free seeds to use the data thus obtained to have an amendment put on the agricultural bill abolishing the distribution.

The Federal Government has been active in prosecuting Trust and combinations said to be in restraint of trade. Certain of the states have passed laws making it a criminal offense to give commissions or "rake offs," yet here is the government itself practicing the most petty form of "graft," a cheap method of influencing votes for congressmen from rural districts.

When the Suffragettes secure the right to vote, it will be up to some congressman to propose a bill for the free distri-

bution of sun bonnets, aprons or patent dishwashers to his female constituents.

It is to be hoped that the efforts of Senator Kenyon may be productive of good results and this rank injustice may be abolished.



Importers' Notes.

Shipments of French fruit stocks are about all in for this season. The stocks are unusually fine, due to the swelling fall rains. During the summer it looked as if the stocks in the beds would produce a good percentage of small sizes, but later rains swelled these into larger grades. All stocks have been pretty well cleaned up, except a few small grades. The specific duty of \$2 per 1000 upon Apples, Pears and Quinces and \$1 per 1000 on Mahalebs, Mazzards and Myrobolans induces orders for the large sizes and is apt to leave small stocks in surplus. February shipments of ornamentals will now soon arrive.

Early shipments from Holland are now beginning to arrive, there will be no shortages except on minor items such as Baby Rambler Roses, then only on orders booked late. Roses generally and Tree Roses are in surplus. There are about 700 growers around Boskoop and 50 around Oudenbosch, though America takes only a small percentage of their products.

The new Quarantine law, which went into effect Oct. 1st, is being rigidly enforced, but thanks to the business-like co-operation between the Federal Horticultural Board and the importers is disturbing the import business very little. Of course minor difficulties will continue to arise, but with mutual confidence and good-will they will be overcome.

The Act prohibits importations of *Pinus cembra*, *strobilus*, *monticola* and *Lambertiana* from every source. The last two varieties are not largely grown; *Pinus strobilus* can be grown here, but *Pinus cembra* is usually imported only in large sizes 3 to 6 feet then mostly from Holland where the nurseries are admittedly the cleanest on earth. It seems hard that the Dutch grower, who also has a good block of say 5 to 6 foot *Pinus cembra*, which are pronounced free of any trace of Blister Rust by his entomologist and which he has spent money in this country to sell here, should be prevented from shipping them, even though he is willing to have them reinspected here at his risk. It is to be hoped that the Federal Horticultural Board will later lift the bars against this useful variety, otherwise it will go out of commerce as it is too slow growing for American growers to bother trying to grow it from seed.

Though I am not an ornithologist, I believe a Federal law to prevent the ruthless killing of native birds and encourage their propagation (such as the Indigo bird) which lives on Brown Tail grub and other insect pests, will do more to prevent the spread of insect life on trees than all the money that has been spent and all the inspection laws that have been passed from Pentecost to the last election.

J. G. HATCH.

# The National Nurseryman

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## HORTICULTURAL EDUCATION

Horticultural Schools, Agriculture Schools, Forestry Schools, Experiment Stations, Societies, Associations, Lecture Courses, Correspondence Schools seem to be the order of the day, and what is the net result in the supply of skilled labor in the nursery business?

Why is it the graduates do not gravitate to the best positions in nurseries? Is it because they are incompetent or is the demand for more teachers, lecturers and men to fill Government positions still so great that it takes care of them all?

There is no question but what a scientific training is a good equipment for a young man to have who has chosen horticulture for his profession, but it is not a complete equipment by any means, and it spoils a good many in the making.

They are apt to make the scientific training their object in life instead of a means to an end. They can talk, reason and explain but they cannot work to produce results and results are the only accepted measure of success in the Nursery Business.

The nurseryman's son, in fact any boy raised on a nursery, who absorbs his father's business into his system, is (perhaps unconsciously) the one who will get the most out of a special course in Horticulture, as it is merely a means to an end with him, as he knows it is only labor that produces.

The boy that goes through the public school, then through the high school and then to a horticultural college is too long before he gets in contact with the soil and hard productive work. There is rarely a position open on a nursery for such a man, and few have the grit to begin at the bottom and work up, even with their educational equipment.

The educational method is wrong; there is too much horticultural book learning in the beginning. The ideal course would be a good common school education followed by four or five years apprenticeship on a good nursery or horticultural establishment, followed by a two year course at an experiment station or college. This is the plan followed by Kew Gardens and is eminently successful as far as turning out practical, well equipped men is concerned.

Encourage the boys to take a four year course on the nursery before they are 21 years of age and then when they do take their horticultural course at college it will count for something and will not spoil them as practical nurserymen.

It is essential they work at "the bench" at the same time they are studying, before they get too old, and the Horticultural schools only play at work.

There will perhaps be a number of nurserymen in the east who have already decided not to attend the convention at Portland the coming June. May be the decision is fixed by necessity and there

is no appeal, but more often we decide such matters on the spur of the moment, for such reasons as—It will cost too much. Cannot spare the time. It is too far away, etc., etc.

If such nurseryman fully realized how necessary his presence was to the progress of the nursery business at large,

## THE NURSERYMAN'S CONVENTION



he would strain a point to go. It would be difficult for him to find an excuse big enough to keep him away. He would be like a pilgrim attending the shrine of his faith; it would be the one object of his year's labor. For there he will have the opportunity to measure himself up against the best in the land in his particular line. Every man he meets will be a sympathetic brother having the same labors, the same troubles and the same ideals. Even though he does not sell a dollar's worth of goods while at the Convention, there will be something wrong with him if he does not get full value for his time and money. He will hear of the progress and success of brother nurserymen and will be able to judge the reason for it. He will also hear of the failures and their causes. In his contact with other nurserymen there will be many leads and hints that will materialize into money if he is live wire enough to pick them up. The trip to the great Empire of the West will be an education that he can get in no other way. He will get a glimpse of the magnitude of his own country and begin to see the stupendous possibilities of the nursery business of the future. He will, unknowingly, drop the small narrow-minded views that are sure to cramp a man who does not travel, and come in contact with the larger views. He will get pointers in buying, selling and growing and what is of most value that personal acquaintance and touch that is only to be obtained by meeting a brother nurseryman while not dressed in his business clothes.

The day is past when a business can hold its own much less progress without constant effort. New systems, new methods, new ideas are cropping up all the time and unless the business man is cognizant of them and to be able to weigh and analyze them and if necessary to apply them wholly or in part to his own particular business, he is falling behind.

For many nurserymen, the annual convention is the only chance he has to get in touch with the newer ideas and the broad reaches of his profession.

Don't miss it. It will pay and the Westerner is noted for his enterprise and hospitality.

**UNNECESSARY LAWS** A bill was introduced in the New York Assembly, February 10th under title of "To amend the Agricultural law in relation to the sale of fruit bearing trees," copy of which is given on another page.

It is evidently aimed at the unscrupulous nurserymen and intended to protect the confiding public. If the gentlemen who introduced the amendment would stop to consider, or perhaps become a little more familiar with the nursery business and the fruit growing industry, he would soon see that such a law will not accomplish the desired result, but tend to retard an important and growing industry. It will fall heaviest on the responsible nurseryman whose aim in business is to send out only reliable stock, true to name, because his business has been built upon honest dealing. The unscrupulous dealer is here today and gone tomorrow; where will he be in six or eight years' time when the trees begin to bear. It is safe to say he will not be within reach of the process server.

Then again, although the trees be tagged when delivered and a bill of sale made out according to the proposed law after several years required for their coming into bearing, how is their identity to be established to the satisfaction of the courts or if this is done, who is going to be the final judge that they are or are not true to label. It may be easy enough with certain varieties but there will generally be difference of opinion enough for a law suit.

What is to prevent a planter from buying say 500 York Imperial from one nursery and 500 Baldwin from another, then changing the labels and bringing civil suit because they are not true to name. If the fruit grower needs protection from the dishonest nurseryman, then so would the nurseryman from the dishonest fruit grower.

Such a law is not needed. The unscrupulous nurseryman is the exception and if the public would deal with responsible houses rather than trying to get something for nothing, they would be no more likely to buy fraudulently labeled trees than if they dealt with the Department of Agriculture itself.

#### THE REED CASE

Nurserymen have cause for congratulation upon the successful outcome of the suit tried before the United States Court, sitting at Denver, Colo., early this month, and which is fully outlined in this month's issue of the NATIONAL NURSERYMAN.

Each year breeds a lot of new laws in the various states, aimed at the nurseryman. Some of them are no doubt good, others are simply annoying, but the greater mass of them are pernicious and are framed by men who have no idea of what they wish to accomplish.

Some of the State laws passed within the last few years, relative to nursery stock have been ludicrous and no attempts have been made to enforce them? Again, others have been enforced, entailing unwarranted loss and inconvenience to the nurserymen.

It is time that this foolish legislation should cease, and the verdict in the Reed case will go far towards suppressing the unnecessary activity of State officials.

The individual nurseryman, the Western Association of Nurserymen, and the American Association of Nurserymen, who subscribed the money to fight the Reed case, deserve the thanks of every nurseryman in the country, and they should rally to the support of these grand organizations which are constantly working to prevent and contest the unjust legislation so rampant throughout the various states.

#### TO NEW AND OLD MEMBERS OF THE AMERICAN ASSOCIATION OF NURSERYMEN

To prevent confusion, all members of the Association—those listed in 1912 Badge Book—should send their Badge Book advertisements, also membership dues to John Hall, Secretary, 204 Granite Bldg., Rochester, N. Y. All new applications for membership, initial dues, and requests for information should be sent to James McHutchison, 17 Murray St., New York. Remit your dues promptly and invite your nursery friends to join.

JAMES McHUTCHISON,  
Chairman Membership Committee.



### W. C. REED WINS AN IMPORTANT SUIT

The long pending suit of W. C. Reed, Vincennes, Indiana, against L. Rounsevell, former inspector in the State of Colorado has at last been tried and a verdict rendered in favor of Mr. Reed for \$152.

The suit grew out of the condemnation and destruction of a lot of approximately 10,000 Apple trees shipped over two years ago by Mr. Reed to a customer in Colorado. Mr. Rounsevell, then State Inspector, condemned the trees and ordered them destroyed, claiming that they were affected with Crown Gall and other dangerous diseases.

The Western Nurserymen's Association took up the case and subscribed a fund of \$250 to help fight the case. Other individual Western nurserymen added \$500 more, and at the annual meeting of the American Association of Nurserymen, held in Boston, last June, the details were laid before the Association and an appropriation of \$1,000 was voted, making a total of \$1,750 available.

The claim of the nurserymen was that if the inspectors were permitted to condemn trees on their own judgment, they would lose thousands of dollars. They attacked the constitutionality of the law and charged Rounsevell with malice.

Several attempts were made to get the suit before the Court, but it was postponed from time to time. The State authorities evidently being reluctant to allow it to come to a head, fearing that if Mr. Reed be successful it would tie their hands by showing that the law was unconstitutional.

While the total value of the trees destroyed was about \$700, an amount of damage was added sufficient to make a total claim of \$5,000 so as to make it large enough to get the case before the United States Court.

Arrayed against the Nurserymen's Association were the various Fruit Growers' Associations and individuals, who claimed that the state officers were right in condemning the trees; that Crown Gall made its way through irrigation channels from orchard to orchard and was a fatal malady even though its work was slow.

Judge Lewis ordered the jury pay no attention to the charges of malice charged against Rounsevell and assess only the actual damages.

Judge Lewis in instructing the jury stated that all the witnesses and evidence produced by the plaintiff (Reed) had shown that root knot on the apple was not a disease, was not contagious, was not injurious to the growth of the trees and did not affect its fruiting, and that if the jury found the evidence to bear this fact out they should render a verdict in the plaintiff's favor. If, on the other hand, they found that it was a disease, that it was contagious, and was injurious as claimed by the defendant, they should return a verdict in the defendant's favor.

Mr. Reed had witnesses and twelve depositions, while the other side had seven witnesses and two depositions.

The evidence in the case covered 300 typewritten pages.

The case was handled by the firm of Thomas Bryant, Nye and Malburn for the plaintiff. Mr. Bryant was in charge of the case and he is also attorney for the City of Denver. Mr. Thomas, the senior member of the firm is ex-Governor of Colorado, recently elected United States Senator from Colorado.

The opposing side was defended by the attorney general of Colorado.

F. L. Rounsevell, the defendant was deputy state entomologist of Colorado and acting under that office when the trees were condemned and destroyed. The decision is very important as it is the first case of the kind ever tried out in the courts. Its effects will be of great benefit to the nursery-men as it had been a contention of nurserymen for years that root knot was not a disease and was not contagious or injurious in the least.

Has the work of the State Horticultural Inspectors of Colorado been nullified and are they without authority to act without subjecting themselves to individual liability?

Archibald Lee, former assistant attorney general, answers both questions in the affirmative. He adds that it appears as if the state law creating the horticultural department has been unconstitutional.



W. C. REED

### MISNAMING ILLUSTRATIONS IN CATALOGUES

There is no question but what an illustration in a catalogue not only assists in increasing the sale of the plant so illustrated, but greatly aids the purchaser in making selections of the tree or shrub he desires for some particular location or purpose.

From this point of view it is unfortunate, if no worse, that nurserymen are not more particular to see that their illustrations are correctly named. The most descriptive catalogue of a prominent nurseryman is before us, fully illustrated and is really good, but a picture of Clematis Jackmanni is labelled "Matrimony Vine" while a photograph of the latter bears the name of the Clematis. A picture of the White Snowberry bears the legend "Almonds" and what is evidently a Japanese Snowball is marked "Snowball Hydrangea." A Platycodon cut passes under the name of "Sweet William" and the Sweet William picture is called "Platycodon." A Cut-leaved Birch is tagged "White Ash" and a "Lombardy Poplar" looks suspiciously like a "Bolleana Poplar." A "White Pine" bears a great resemblance to a Hemlock Spruce.

From the excellent reputation and standing this firm possesses there is no question of their honesty of purpose. It is more than likely that proper attention was not given to the reading of the proof, or perhaps misplaced confidence in the judgment or intelligence of the printer.

## GETTING READY FOR THE SPRING RUSH

Half the nurseryman's troubles would be removed if his shipping and planting season could be extended through the year instead of being crowded into a few weeks in the spring and a few in the fall, but this cannot be, so everything possible should be done in advance that will facilitate the work when the rush does come.

In the office there are many ways of planning to get ahead on the work. It is useless to attempt to tell in detail what should be done because every office has its own peculiar system or lack of it, but it is safe to say few offices really work in advance to the extent it is possible. Late advertising to a certain extent can be forecasted and put in such shape that little revision will be necessary. Form letters, paragraphs can be prepared and will be found to be great time-savers. A glance through a previous year's correspondence will reveal the kind of inquiries that will likely be received and if form letters are prepared in advance the stenographer will be able to adapt them and make quotations, acknowledge orders without requiring a special letter to be dictated every time. Orders on hand can be written up and everything possible done in connection with them, so they will be ready to turn out when the time comes without detail information.

Lost steps and waste movements are great efficiency killers and it is worth while to analyze these occasionally and see if some little scheme will not correct them. For instance, when the mail is being opened and read, separation according to future treatment should begin at once, into separate receptacles. Even in a one man office it dispenses with a great deal of handling of papers and lost motion.

One nursery office where there were a great number of employees, adapted the ingenious scheme of using different colored folders to indicate orders, inquiries and complaints, so that the color indicated the routine for the particular piece of mail to which it was attached.

On the nursery or in the packing sheds it is equally important to use every means possible to bring efficiency up to the top notch. The season is so short the nurseryman often sacrifices his own planting so as to keep the orders moving. Of course on large nurseries where orders are filled from the storage houses and the digging and packing is done by entirely different gangs of men that do the planting it is not such a problem, but a great many nurseries cannot maintain separate gangs and planting suffers accordingly.

Efficiency in the packing shed consists of having boxes and packing material handy and in good shape. Stock if possible, labelled in advance. Heeling in grounds bins or whatever method is used well arranged and convenient. The principle of the manufacturers is a good one—the raw material to come in in one direction and the finished product to leave by the other. All movements in one direction.

The simpler the processes the quicker will green help catch on and the greater will be the saving in energy and time.

Nursery work is not mechanical but it should be made so whenever possible to give freer use of the mind to those tasks that actually need it.

## THE APPLE AND CHERRY ERMINE MOTHS

The following is a summary of Bulletin No. 24 issued by the New York Agricultural Experiment Station.

During recent years colonies of the caterpillars of the apple and cherry ermine moths have been discovered in considerable numbers in the State of New York. These insects were introduced in shipments of foreign nursery stock and appeared in plantations of imported apple and cherry seedlings. According to the records of the Division of Nursery Inspection infested plants have been found at Lockport, Hilton, Chili, Dansville, Rochester, Penfield, Newark, Orleans, Seneca and Geneva in western New York; at Johnstown and Schoharie in the Mohawk Valley region, and at Blauvelt, in the Hudson River Valley.

From the material that has been collected two species of moths were bred—*Y. pomonella malinellus* Zell., which thrives largely on apple, and *Y. padellus* L., which is a more general feeder, showing preference for hawthorn, plum and cherry. Both species are common and destructive fruit pests in Europe.

The adult insects are small moths, with snowy white, black-dotted anterior wings. The hind wings are gray or leaden in color, with long fringes on lateral and posterior margins. The wing expanse is about 20 mm. The caterpillars are quite variable in color, ranging from pale to grayish or greenish brown, and they average about 15 mm. in length. They have web-forming habits and live in a common web, and in this they spin their cocoons.

In the studies on the life history of these insects during the past four years the moths appeared during the first two weeks in July, and oviposition began about the middle of this month. The eggs are deposited in oval-shaped masses near a bud, usually of the current year's terminal growth, and less frequently on the older wood. Hatching takes place in early autumn and the young larvae remain through the winter under the protecting crust of the eggshells. In the spring they assemble among the tender leaflets of an adjacent bud, which they attack. The older caterpillars feed openly on the foliage under the protection of a thin, grayish web. With the need of more food they extend their webs, seizing and involving fresh leaves in a common nest. In severe attacks trees may be defoliated and completely covered with the silken tents of the insects. Pupation took place during the latter part of June and early July and the moths lived from the beginning of July to about the middle of August.

These insects have, in their normal habitat, a large number of natural enemies, the most important of which belong to the orders Hymenoptera and Diptera. In spite of the large numbers of the moths' eggs imported into the United States, the lepidopterons were apparently unaccompanied by their more common and efficient parasites. An ichneumon, *Mesochorus* sp., was obtained from *padellus* reared on cherry, and a tachinid, *Exorista arvicola* Meigen, was quite abundant in some colonies of *malinellus* caterpillars subsisting on apple.

Comparisons of the structures of the caterpillars and of the male genitalia show no tangible structural differences between *padellus* and *malinellus*. The absence of differential

features suggests that the moths from hawthorn and cherry and those from apple constitute a single species; but cross-breeding experiments are desirable to settle definitely the status of the two forms.

An outbreak of these insects is to be expected from two sources: (1) From the annual importation of infested foreign-grown nursery stock, and (2) from spread of the pests that may have established themselves along the avenues of trade in previous shipments. The remedy is careful inspection of nurseries during June and the destruction of infested plants. As fruit pests, the insects would prove amenable to prevailing spraying practices.

### ARTIFICIAL MANURES AND PROPAGATION

The use of artificial manure is now so general that it would be easier to find gardens where but little else in the way of manure is used than one wholly free of it. That there is much to be said in favor of artificial manure cannot be gainsaid, but at the same time the wholesale use of it has many drawbacks. In competition, nowadays, produce has to be grown to a pitch of excellence hardly attainable by what might be termed natural methods. Take for a moment Chrysanthemums; these can be fed with natural manures up to a certain point, but then, if the flowers are to excel, a more concentrated stimulant must be relied upon in order to give the last finishing touches, and rush the plants, if such a term may be used.

Not long ago I saw a statement to the effect that it was unwise to "poison" Sweet Peas with doses of artificially compounded manures. This set me thinking. After due reflection and observance of the action of such manures, I must say that I have come to the conclusion that artificial manures do, to a very great extent, poison a plant. Of course, this process varies in intensity much as alcohol does to a man who drinks intoxicants, and just as a man who partakes of a moderate quantity of alcoholic liquor works off the effects, so to speak, and possibly benefits by the stimulant, so a plant which receives but little artificial exhausts the baneful after-effects, and by becoming hungry again does not accumulate poison. On the other hand, if a man drinks to excess we know what happens. He may, up to a given stage, wax fat, like the old time inn-keeper, but beyond that, if he once collapses, it is most difficult to "feed him up." So, exactly, does this apply to vegetation, if fed artificially. The whole tendency is towards a gross growth, and the whole plant is working at forced speed, which, although very encouraging while it lasts, is nevertheless liable to suddenly stop, and no possible means can then be devised to start the plant again with anything like its natural vigor. It is, in fact, poisoned.

Now, what is the result of artificial manure on the next generation? I do not think it is an exaggeration to say disastrous. In many instances that have come under my notice during the last few years of several species of flowers which are popular as exhibition subjects, I have been struck with the difference in the cuttings taken from naturally grown plants or stools and those from artificially fed but

otherwise similar stock. This fact is not so remarkable perhaps in the case of Chrysanthemums and similar flowers, where to a certain extent the cuttings are produced from the lower portion of the original stem, and from roots still remaining in the same soil as was frequently saturated with the manures. It is when we come to tubers, as in Dahlias, that the far-reaching effects of stimulants given during the preceding autumn is plainly traceable. Very often roots or tubers grown in this way are extremely large, yet in spite of the apparent force thus stored up in the way of nourishment, the eyes start weakly, and the cuttings are both delicate and of bad color. Why this should be so I am quite at a loss to say, but from repeated experiments on roots of the same variety, I can definitely say it is so, and there is no question that, in the way of a tuber, which is grown absolutely on natural manures will produce better cuttings than the larger but artificially fed one. Also the cuttings of the first named will root much quicker than the other.

This brings us to another most important point, and that is, what is the ultimate result of the artificial feeding? For instance, many growers maintain that cuttings taken from stools that have produced fine flowers are possibly weaker in constitution, but their strength runs more into bloom than foliage, and in the end a better flower is obtained than would be the case if the cutting had been stronger, but taken from a naturally grown parent plant. If this is so, the artificial manure may not be so hurtful as at first appears, but I cannot fall in with this view, although it would at times look almost as if there is some truth in it. As, for instance, when a new Chrysanthemum is introduced, and it becomes more floriferous year by year, as if gradually the stock became more capable of producing flowers; but this, I think, is to be accounted for by the growers becoming more and more used to the habit and peculiarity of any given variety. —HARRY STREDWICK, *Journal of Horticulture*.

### PHYSIOLOGICAL EFFECT OF BORDEAUX MIXTURE

During the past five or six years experiments were carried out in Germany with a view to determine whether the increased yield resulting from spraying with Bordeaux mixture was due to a physiological effect on plants. In some experiments with potatoes, radishes, and beans, the crop decreased with an increased strength of Bordeaux mixture used. The mixture was found to have a favorable physiological effect only in dry weather, the mixture acting by hindering transpiration from the leaves. It was considered possible that the coating of copper sulphate also acted as a shade to the plant from an excessive amount of sunlight in hot, sunny weather, and thus prevented an early ripening of the haulm. The repeated spraying of currants and gooseberries with Bordeaux mixture had the effect of increasing the sugar content of the sap of these fruits. This was shown not to be due to the fungicidal action, as spraying immune varieties of fruit had the same effect; nor to any increased assimilative activity of the leaves, the latter, indeed, decreasing as a result of the spraying.—*The Gardeners' Magazine*.



## Obituary.



### PROFESSOR T. V. MUNSON

Professor T. V. Munson was born in Fulton Co., Illinois, September 26, 1843,—son of William and Maria Munson. He was reared on the farm. He graduated from the University of Kentucky in 1870, and became professor of natural sciences in that institution,—which position he held for two years.

Declining in health and acting under the advice of his physicians, to live an outdoor life, he resigned the professorship and engaged in horticulture, in which pursuit he was so successful as to acquire an international reputation.

For his eminent services in eradicating the diseases of the grape in the vineyards of France, he received from the French government the Decoration of the Legion of Honor.

As a breeder and improver of grapes he stands at the head of the list, having introduced more new and valuable varieties than any other living man. He was an accomplished botanist, geologist and chemist. In recent years he gave the world a work on grape culture which, in comprehensiveness of treatment and knowledge of the vine, surpasses any other treatise on the subject in the history of horticulture. So important was this work as a contribution to the science of horticulture that it has received the most favorable criticism and commendation from the best posted men in this country and in Europe.

He measured up to the highest standard as a father, as a husband, as an investigator, as a business man, as a citizen *and as a friend.*

He was born with a love of truth, honesty and sobriety. He agreed with those writers who believed in a God as broad as the whole universe,—who is the beginning and the end, the Alpha and the Omega,—in whom we live, move and have our being.

While he differed from many in this, he had the profoundest respect for the views and opinions of others. He conceded to all men the right to think for themselves, but he claimed the same privilege for himself. His chief aim in life was to accomplish something that would help his fellow-man. His greatest joy was that he had done something in this line. -

He was born a gentleman. He could not have been anything else. He was a man of profound culture, and the force of that culture was irresistible to all who had the happiness to associate with him. Born,—lived,—died, is the simple biography of most men. It is not enough for him. He was born well, he lived well, he died well.



T. V. MUNSON

To his physician and the loved ones at his bedside he said: "It is all right. I have not a regret. My life has been full and satisfactory. I am ready." He was truly one of the real noblemen of this world. It was such lives as his that inspired Longfellow when he wrote:

Lives of great men all remind us  
We can make our lives sublime,  
And departing leave behind us  
Footprints on the sands of time.

Footprints which perhaps another  
Sailing o'er life's solemn main,  
A forlorn and shipwrecked brother  
Seeing shall take heart again.

### WALTER TICKNER

Walter Tickner, who planned and superintended the laying out of many of the parks and grounds in Rochester, died yesterday morning at his home, No. 86 Richard street, after a brief illness, aged 77 years. The funeral services will be held at the Salvation Army Citadel, No. 64 North street, at 2 o'clock on Tuesday afternoon. Adjutant Heift is to officiate. Mr. Tickner was a member of the army for several years. Interment will be made in Mount Hope Cemetery.

Mr. Tickner was born in England and learned his trade there and came to this city twenty-three years ago. He was well known as a landscape gardener and architect and laid out many plots that have become show places of Rochester. He planned Willow Pond and Kodak Park, the latter one of the largest industrial parks of the country. He also laid out the extensive grounds surrounding the East avenue home of George Eastman and the park of the German-American Button Company. Others who employed Mr. Tickner were A. M. Lindsay, Henry A. Strong, H. L. Brewster, Dr. R. R. Fitch, C. H. Ocumpaugh, G. W. Todd, A. J. Katz and J. K. Hunt.

Mr. Tickner leaves his wife, a daughter, Mrs. Charles Large, of Kenmore, and three sons, William, Albert A. and Leigh A. Tickner, all of this city.

### THE LATE WILLIAM D. ELLWANGER

William D. Ellwanger, a son of the late George Ellwanger and himself an active figure for many years in the business and social life of Rochester, N. Y., died Sunday, February 16, at his home, 510 East avenue. He had not been in good health for some time, but his condition was not considered serious. Mr. Ellwanger was president of the Ellwanger & Barry Nursery Company, and also of the Ellwanger & Barry Realty Company. His club connections were numerous and his name appeared in the directorate of several business institutions. He also was a writer of prose and verse that were received with favorable comment. Besides his wife he leaves one daughter, Evelyn S. Ellwanger.



## SELLING METHODS

By STANLEY V. WILCOX

The statement that outside of a few staple fruits, the majority of nursery stock must be looked upon, by buyer and seller, as more or less of a luxury, is not a new one, but is certainly one that will bear repetition.

Keeping this in mind, it is evident that we must inject into our selling department a great deal of initiative, a very positive quality. Phrases that mean the same are "first move" and "new departure."

We must continually seek new and original methods of interesting the public, keeping before us that this awakened interest must be sustained right up to the point of the actual sale.

Both in the matter of initiative and sustained interest the relation of the business as a whole to the sales department, in the guise of a composite salesman, must be clearly understood and appreciated. Let us state this principle briefly.

If the business has for its object, the sale of goods for profit, then the entire organization may be considered as a salesman, a composite salesman.

The packing department has a bearing on future sales in every shipment that is received in the best of condition; the nursery department, in every perfectly grown, well rooted specimen that it sends out; and so on it goes, from department to department, from the head of the firm to the newest employee.

Initiative must be a characteristic of every part of the business, therefore, but the largest expenditure should be directed through channels that have a direct bearing on sales.

The ignorance of the general public regarding nursery stock for ornamentation or utility, is the greatest problem we have to face. It is a weakness in our educational system that should be bolstered up. Until it is, every nurseryman must spend freely of his time and capital to disseminate horticultural information and thus increase the demand for his products. Many other things that education has taught us to regard as necessities were one time classed as luxuries and this same evolution must be brought about in the nursery business.

How can we do it?

Are not our horticultural shows and exhibitions aimed at such a target? They should be, but I think we miss very often through the near-sightedness of the head gunners. The most telling shots are usually placed in the midst of those already interested while the rank and file is quite often missed entirely.

The remedy in this instance is to conserve effort on the inner circle and to beat vigorously the outlying territory. Resolve to make our every show and exhibition a great educator and interest breeder to the public at large.

Possibly the most effective educational work the nurseryman does now is through his catalogues and other printed matter. Much garden literature is wasted effort, however, through failure to write it as it is to be read.

Remember that our literary efforts must appeal to many classes. On one hand, we have the novices, who know little of plants or gardening, or of the sciences relating to garden-

ing art. To these the reading should be plain, practical and interesting. Again, we must appeal to hosts of interested garden lovers who desire to keep abreast of the times. These have already taken their first lessons in gardening and are ready for advancement and sustained interest.

How are we to know to which of these several classes our effort is aimed?

This brings up a point that is worthy of our deepest consideration. A point that to bring about the best solution will require all of our powers of initiative and concentration.

To know just the kind of literature that will have the strongest appeal, we must first know as much about the customer or prospect as possible. A bond salesman must know that his prospective customer has the means to purchase his offerings. This information is to be had from financial Red Books and other such sources. There is no such short cut, however, to tabulated information regarding prospective buyers of nursery stock. Wealth alone is no criterion of a knowledge and interest in trees and plants.

We must know principally the size of the property, whether new or old, planted or unplanted, fully stocked or a continuous purchaser. These and any other points that will aid in making the best appeal.

Firms having an outside sales force are best equipped to secure such information, other firms must secure it through other channels.

Once secured the matter of properly tabulating it for convenient use is another serious problem.

Such a system should be the basis of all our mailing lists and selling methods. Questions of personal solicitation or mailing campaigns should be evolved therefrom.

I could enumerate many instances to prove the value, and in the question of retail selling, almost the necessity of such a system. Our scope as nurserymen in general, is so large, however, and our appeals so diverse that the system would be greatly modified, contracted or enlarged to meet the various needs.

The fundamental idea of all our selling methods should be this, to increase the demand for nursery stock, that can be sold at a profit, the quickest and surest way to bring about this increase is through such education of the public at large, that the planting of trees, shrubs and flowers will become necessary to every home and community and not a luxury to be dispensed with where possible.

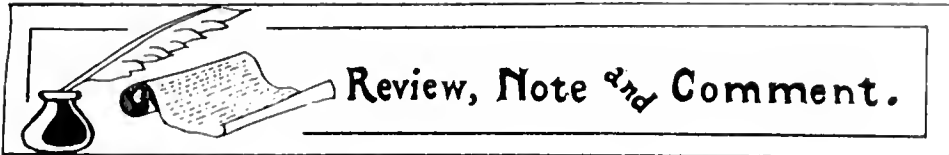
## EUROPEAN AGRICULTURAL TOUR

The Third Annual Agricultural Tour has been arranged under the directorship of Mr. J. I. Schulte, Department of Agriculture, Washington.

A splendid itinerary has been arranged and takes in those points in Europe of most agricultural and horticultural interest, and to attend the International Congress at Ghent, Belgium, June 8th to 18th.

It is planned to sail May 31st from New York, returning August 12th to Boston.

Those interested should apply to Bureau of University travel, Trinity Place, Boston.



Professor R. L. Watts has been appointed Dean and Director of the School of Agriculture and Experiment Station of the Pennsylvania State College. Prof. Watts went to the Pennsylvania State College three or four years ago as Professor of Horticulture and has since been acting in that capacity. He has done much valuable work in that department.

Since the resignation of Director Hunt, Prof. Watts has been acting Dean and Director. Those who are acquainted with him know that the trustees of the Pennsylvania State College have made no mistake in their selection of a head of the agricultural department of that institution. Prof. Watts hopes to be able to continue his work along vegetable lines, which has been of so much value to growers in other states as well as Pennsylvania. We congratulate the people of Pennsylvania and Prof. Watts.

The catalogue of the Munson Nurseries, Denison, Texas while not a voluminous one contains some good original matter on the grapes.

The late T. V. Munson was an authority on the subject. It is such men as he who make history in the Horticultural world. His pioneer work in hybridizing and improving the native grapes will doubtless be the foundation of great things to come along this line.

His list of grapes are named and described in the catalogue in the order of ripening and cover a period from the last of June until September.

The percentage and description of each variety is given and the locality to which they are best adapted.

G. Hale Harrison, son of Orlando Harrison, Berlin, Maryland, was a caller at the NATIONAL NURSERYMAN offices. Mr. Harrison is attending school at Cornell but still finds time to keep in touch with nursery interests.

*The Monthly Summary of Commerce and Finance* for December 1912, gives the following report of imports of plants, trees, shrubs and vines:

ARTICLES	DECEMBER—				TWELVE MONTHS ENDING DECEMBER—					
	1911		1912		1910		1911		1912	
	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values
<b>Plants, trees, shrubs and vines:</b>										
Fruit plants, tropical and semi-tropical for propagating purposes.....free..		9,889		121				11,941		13,279
Bulbs, bulbous roots, or corms, cultivated for their flowers or foliage.....M..dut..	15,524	145,558	10,661	131,069		1,553,115		1,817,292	297,279	1,858,574
All other.....dut..		105,507		121,040		1,104,124		1,222,946		1,302,379
Total.....		260,954		252,230		2,657,239		3,052,179		3,174,232

<sup>2</sup> Figures cover period since July 1st

The Year Book of Stark Bros. Nurseries and Orchard, Co., Louisiana, Mo., is before us with an extremely highly colored cover in which their "Delicious" apple figures largely.

Even if the cover may be described as a little sensational, with the evident object of attracting attention and making it distinct, there is nothing overdrawn in either illustrations or text in the inside. In fact, it is a work of reference on fruits. The descriptions being well written. The opinions of numerous well known fruit growers as to the value of the different varieties in different localities are extremely valuable. It is not a catalogue in the ordinary sense, in fact it contains neither bargain offers, collections or even praises. It is a book that all fruit growers or intended fruit growers should have.

### BRITISH SUFFRAGISTS DESTROY VALUABLE PLANTS IN KEW GARDENS

The daily papers gave an account of the Militant suffragettes hiding in the Kew Gardens over night and selecting a time in the early morning hours worked their own sweet will with the glass in the Orchid houses and with the plants themselves, destroying about \$5,000 worth.

Who would have thought that women would wantonly destroy plants and flowers even to obtain a vote?

VERMONT STATION, Burlington, J. L. Hills, Director.

Plant Diseases in 1911. Potato Spraying Experiments in 1911. By B. F. Lutman. (Bulletin 162, pp. 35-45, fig. 1.)

A statement of the more important plant diseases observed during 1911 is given with a brief progress report on the spraying experiments with potatoes to determine the profitability of consecutive yearly spraying of the crop.

Commercial Fertilizers. By J. L. Hills et al. (Bulletin 166, pp. 243-320.)

This bulletin reports the results of analyses of fertilizers inspected during 1912, discusses the quantity and quality of the plant food in the brands of fertilizers of the current and preceding years, the relation between selling price and valuation, and gives a summary of the results of fertilizer inspection for the last five years.

## SULPHATE OF IRON TREATMENT OF GOOSEBERRY BUSHES

The treatment that was given to the gooseberry bushes, or rather the land beneath them, was as follows: The date of application was August. "The gooseberry bushes were badly infected with American Gooseberry Mildew, and in August, 1910, I gave them a dressing of sulphate of iron, finely ground, about 1 cwt. to 1¼ cwt. per acre, evenly sown all over the ground covered by the bushes, and hoed it in, at the same time cutting off and burning all infected shoots before the mildew had much chance of spreading its spores." The bushes were afterwards heavily manured in order to induce strong rank growth and so to give the mildew every chance to come again, but it did not appear. Again, this year, I heavily manured, but no mildew again, although in both years long rank shoots grew, just the sort the disease always fixes on if it does come. Many acres have now been done during the autumn, and the 1910 bushes will not be done again until next autumn in order to give the mildew a chance.

We have all along advised the use of sulphate of iron on land under infected gooseberry bushes, and it would appear by this experiment that August is the best month for its application. There is little doubt that sulphate of iron has a corrosive effect on fungi, and that it does much to tone up fruit trees and bushes in general. We should hear less of silver leaf if more of this cheap chemical were used.—*The Fruit Grower*, London.

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**EVERGREENS AND HOW TO GROW THEM**, by C. S. Harrison. A complete guide to selection and growth of evergreens for pleasure and profit, from seed and nursery, to wind-breaks, and hedges. Illustrated. Price, 12 mo. cloth 100 pp., 50 cents; paper, 25 cents.

**AMATEUR FRUIT GROWING** by Samuel B. Green, a practical guide to the growing of fruit for home use and the market, written with special reference to a cold climate. Illustrated. 134 pp., Price, 12 mo., cloth, \$0.50; paper 25 cents.

**VEGETABLE GARDENING**, by Samuel B. Green, 10th edition. A manual on the growing of vegetables for home use and the market, profusely illustrated. 252 pp., Price, 12 mo. cloth, \$1.00; paper, 50 cents.

**GRASSES AND HOW TO GROW THEM**, by Thomas Shaw, covering name and character of all the principal grasses in America: temporary and permanent pastures; methods in making hay, etc. Illustrated, 453 pp., Price, 12 mo. cloth, \$1.50.

**WEEDS AND HOW TO ERADICATE THEM**, by Thomas Shaw, giving the names of the most troublesome weed pests east and west and successful methods of destroying them. Price, 16 mo. cloth, 210 pp., 50 cents; paper, 25 cents.

**FARM WIND-BREAKS AND SHELTER BELTS** by Samuel B. Green. A manual of tree planting for wind-breaks and shelter with description of the most suitable trees hardy enough to stand Northwestern conditions. Practical cultural directions from seed to maturity. Illustrated. 69 pp., Price, paper, 25 cents.

**ELEMENTS OF AGRICULTURE**, by J. H. Sheppard and J. C. McDowell, a complete treatise on practical agriculture covering plant and animal breeding thoroughly illustrated. A complete text book adopted in public and agricultural schools throughout the Northwest. 12 mo. cloth, 100 pp., Price, \$1.00.

**POULTRY MANUAL**, by Franklane L. Sewell and Ida E. Tilson. A safe guide to successful poultry culture in all its branches, fancy and practical; breeding and feeding; diseases and remedies; how to make farm poultry pay, etc., etc. 12 mo. 148 pp., Price 50 cents; paper, 25 cts. (40th thousand).

**POULTRY HOUSES, COOPS AND EQUIPMENTS**, by H. A. Nourse, (editor of the Poultry Herald). A book of newest plans for building practical up-to-date poultry houses, with description of coops, fixtures and poultry utensils for the farm or village poultry keeper. Profusely illustrated. 100 pp., Price, paper 25 cents.

**EGG MONEY HOW TO INCREASE IT**, by H. A. Nourse. A book of complete and reliable information on the more profitable production of eggs on the city lot, the village acre and the farm. The instruction in this book will make the "200 eggs a year hen," a reality for the intelligent poultry man. 128 pp., completely illustrated. Price, paper, 25 cents.

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Chair's Choice .....	430	680	780	660
Crawford's Early .....	5000	4220	3520	2460
Crawford's Late .....	4580	3960	3160	3000
Chinese Cling .....	490	20	440	380
Emma .....	70	60	80	160
ELBERTA .....	35250	23640	22920	13060
Fitzgerald .....	1280	540	780	500
Foster .....	1070	1440	2160	1900
Greensboro .....	440	300	360	380
Gold Dust .....	330	600	1140	1480
Heath Cling .....	780	1460	3100	2320
Henryetta .....			80	120
Hiley .....	1380	1000	600	440
Matthew's Beauty .....	570	220	240	220
Mayflower .....	160		540	1912
Miller Cling .....	425	342	223	185
Mt. Rose .....	112		212	265
O. M. Free .....	195	265	165	115
Ringgold Cling .....	65	325	765	925
Salway .....	2512	541		883
Sneed .....	1254	562	862	685
Smock .....	365	222	245	345
Stump .....	131	245	423	612
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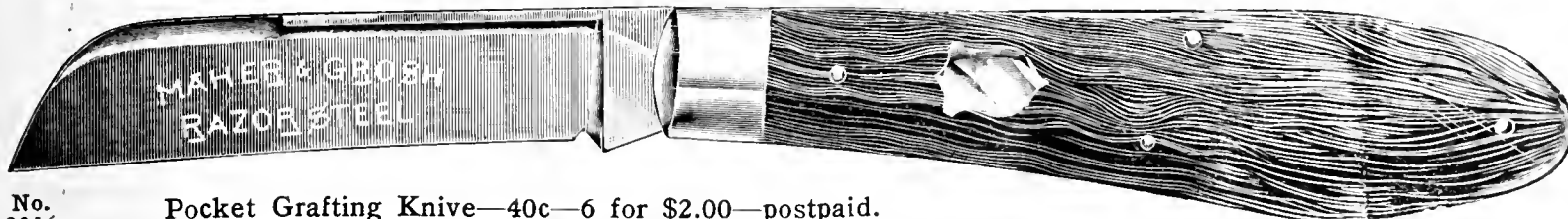
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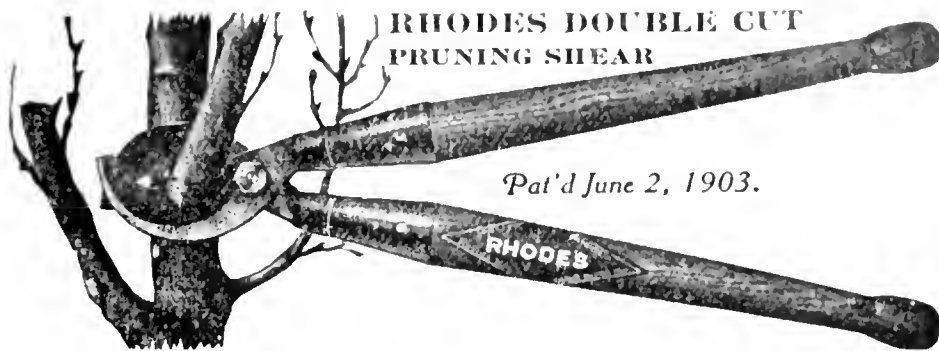
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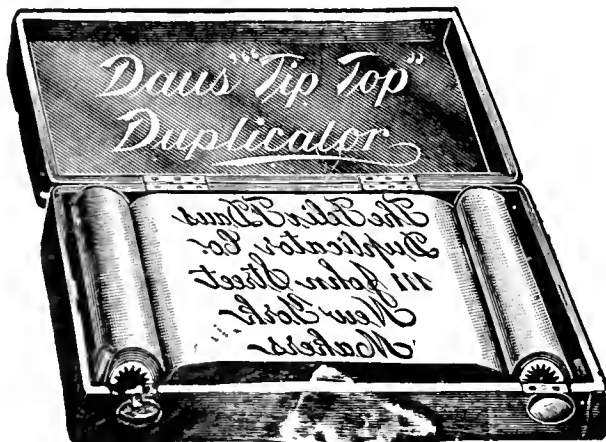
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The surplus list below will be of interest to you in filling your rush orders for this spring. Let us quote prices on your needs—or furnish you with details and quotations on any other stocks for spring delivery.

## SURPLUS LIST

### APPLE, two-year

	1 in.	6-7 ft.	5-6 ft.	4-5 ft.	3-4 ft.
		$\frac{11}{16}$	$\frac{5}{8}$	$\frac{1}{2}$	
Apple of Commerce	50	200	100		
Baldwin	400	400			
Ben Davis		1000	1000	700	200
Bismarck	30				
C. R. June		400	90	40	
Carthouse		50	50		
Coffelt Bty.		100	50	50	
Cooper's Market		75	1 00	50	
Ely. Melon		100	20		
Ely. Strawberry	10	40	10		
Fanny		50	25		
Flora Belle	10	20			
Golden Sweet	200				
Gravenstein		500	300	200	150
Ingram	20	30			
Jeffries		30	20		
Jonathan			200	200	
Kennard's Choice		100	40		
Late Raspberry		70	60		
Lawver	110	30			
Longfield	30	40			
Mann	60	210	20		
Mo. Pippin		300	40	20	

### APPLE, one-year (Continued)

	6-7 ft.	5-6 ft.	4-5 ft.	3-4 ft.	2-3 ft.	1-2 ft.
	$\frac{11}{16}$	$\frac{5}{8}$	$\frac{1}{2}$			
Duchess				500	400	400
Ely. Harvest	400	1500	1500	900	500	500
Ely. Colton			90	50	50	
Ely. Strawb.			280	20	50	
Ensee		45	50	100	60	
Fallowater		250	1500	100	200	
Fanny		40	100	75		
Fourth of July		400	1000	1000	400	500
Gano	900	3500	6000	4000	2000	2000
Golden Sweet	90	90	40			
Gravenstein		600	500	500	180	100
Grimes Golden					1000	500
Jeffries			90	100	50	
Jonathan		800	4000	5000	5000	3000
King	200	700	1000	500	300	
Kennards Choice		25	1 60	50		
Lankford			40	40		
Lawver			60	60		
Limbewig			200	100	50	
Longfield			40	100	40	
M. B. Twig					500	500
Mann			100	50	50	
McIntosh					5000	3000
Mo. Pippin		100	300	90	20	

	1 in.	6-7 ft.	5-6 ft.	4-5 ft.	3-4 ft.	2-3 ft.
		$\frac{11}{16}$	$\frac{5}{8}$	$\frac{1}{2}$		
Myrick	60	20				
Nero		500	300	200		
N. W. Greening		1000				
P. W. Sweet		500	20			
Paynes L. Keeper		60	50			
Pewaukee	50	20				
Rambo	360	180				
Red Astrachan		90	400			
Rolfe		100	20			
Senator		80				
Smith's Cider	380					
Springdale	40	50				
Stark	700	1500	700			
Strawb. (Chenango)	25	150				
Sutton Bty.		25	20			
Townsend	10	20				
Vt. Bty.	10	20				
Winesap				1000		
Yel. Transparent	1000	6000	1000			
Yel. Belleflower	100					
York Imperial	5000	25000	20000	5000	1500	

### CRAB APPLE, two-year

Golden Bty.	140	700	180	70		
Martha		50	50			
Transcendent	150	1000	300	400	400	60

### APPLE, one-year

	6-7 ft.	5-6 ft.	4-5 ft.	3-4 ft.	2-3 ft.	1-2 ft.
	$\frac{11}{16}$	$\frac{5}{8}$	$\frac{1}{2}$			
Alexander			300	400	500	
Baldwin	1000	10000	15000	15000	3000	500
Ben Davis		3000	5000	1500	1000	500
Bismarck			100	50	50	
C. R. June		100	300	90	75	
Carthouse		50	50	300	50	
Coffelt Bty.		50	100	50	50	
Cooper's Market			200	50		
Dominie		100	290	100		

	6-7 ft.	5-6 ft.	4-5 ft.	3-4 ft.	2-3 ft.	1-2 ft.
	$\frac{11}{16}$	$\frac{5}{8}$	$\frac{1}{2}$			
Myrick		100	100	175		
Nero	700	600	1400	4000	4000	1000
No. Spy			500	500		
N. W. Greening	250	2500	3500	2500	1000	1000
P. W. Sweet		1000	2000			
Pewaukee		70	70			
Porter			50	50	50	
Rawies Janet			250	100	50	
Rambo		1000	200	400		
Red Astrachan	250	2000	1000	900	900	1000
Rolfe		150	50			
Rome Bty.					5000	5000
Salome				70	250	
Scott's Winter			100	150		
Smith's Cider		200	180	120		
Smokehouse		200	300			
Spitzenburg		200	500	400	100	100
Springdale			200	50	50	
Stark	1000	2800	1100	500	500	500
Stayman's	300	10000	12000	30000	30000	30000
Strawb. (Chenango)		200	200	200	70	
Sweet Bough			200	400	300	
Tallman Sweet		400	800	500	500	50
Walbridge			100	100		
Wealthy			1000	2000	2000	500
Wm. Ely. Red					1000	1000
Winesap	400	5000	7000	7000	7000	4000
Winter Banana		800	500	500	400	400
Wolf River	1000		500	400	400	100
Yel. Trans.		190	5000	5000	5000	2000
Yel. Belleflower		70	50			
York Imperial		10000	15000	15000	10000	10000

### CRAB APPLE, one year

Golden Bty.	40	140	150		
Hyslop		190	190	200	
Martha		190	90	40	
Transcendent	300	1500	1500	400	400
Ark. Beauty	60	300	130	70	40

**Harrison's Nurseries**  
J. G. HARRISON & SONS PROPRIETORS  
BERLIN MARYLAND

Designed and written by The McFarland Publicity Service, Harrisburg, Pa.

W. F. HUMPHREY, PRINTER, GENEVA, N. Y.





# THE NATIONAL NURSERYMAN



APRIL, 1913

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

## THE MONROE NURSERY

Established 1847.

OFFER A GENERAL LINE OF

### Choice Nursery Stock

## CHERRY and STD. PEAR

of Extra Fine Quality.

If you are in the market for superior trees write  
us for prices.

### I. E. Ilgenfritz' Sons Co.

MONROE, MICH.

## MOUNT ARBOR NURSERIES

E. S. WELCH, Proprietor

136 Center St., Shenandoah, Iowa

We offer one of the largest and most complete  
lines of high quality NURSERY STOCK in the  
United States.

Immense stock of Apple, Cherry, Peach, Currants,  
Gooseberries, Ornamentals.

### APPLE

Over 100 varieties, including the best commercial  
sorts, such as Jonathan, Delicious, Duchess, Gano,  
Grimes' Golden, McIntosh Red, Stayman's Winesap,  
Wealthy, Winesap, etc.

CORRESPONDENCE AND INSPECTION INVITED

## EVERGREENS

### OUR LEADING SPECIALTY

RHODODENDRONS, HEMLOCKS, WHITE  
PINES, BOX BUSH. A general collection  
of specimen ornamentals.

ALSO

NORWAY MAPLES, PIN OAKS, IBOTA  
PRIVET, SPIRAEA VAN HOUTTEI  
by the thousand.

### Andorra Nurseries,

WM. WARNER HARPER, Prop.

CHETNUT HILL, PHILA., PA.

## THE JEWELL NURSERY CO.

*Wholesale Nurserymen*

LAKE CITY, MINNESOTA

Established 1868

1500 Acres

Everything in the line of Nursery Stock  
suited to Northern culture.

*Let us figure with you*

# BAY TREES



STANDARD

For landscape work, summer decorations and formal gardening, **BAY TREES** are indispensable. They are shipped in good strong or new tubs—ready for use.

Shipments arrive during April so you should **ORDER NOW**. Write at once for Special Import Prices. You cannot afford to be without a stock of **BAY TREES** as the demand is steadily increasing. Don't lose good profitable business by delaying placing your order, as import orders for Spring Shipment must be received promptly.

**McHUTCHISON & CO.**  
THE IMPORT HOUSE

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NEW YORK



PYRAMID

*Quotations sent only to the Trade*

## SIMPSON

is the name of the men who grow the finest

## CHERRY

that can be produced by suitable soil, climate and expert knowledge.

Take a look at the stock or ask for a sample and be convinced of the extra quality of their

## TREES

PEACH

ST. PEAR

APPLE—1 year, 2 year and 3 year  
AMERICANA PLUM ON PLUM  
COMPASS CHERRY ON PLUM

**H.M. Simpson & Sons**  
VINCENNES, INDIANA

## For Winter and Spring Orders

WE OFFER THE FOLLOWING FROM  
OUR MAC CLENNEY NURSERY . . .

- 4000 **Mulberries**, mostly of Hicks variety, smooth and free from blight.
- 15000 **Figs**, mostly of the Celeste and Lemon varieties.
- 20000 **Peach**, in 2 to 3 ft., 3 to 4 ft. and 4 to 5 ft. sizes.
- 25000 **Plum on Plum**, Abundance, Burbank, Wickson, Red June, Gonzalez, and other leading sorts. Sizes  $\frac{1}{2}$ ,  $\frac{5}{8}$ ,  $\frac{3}{4}$  and 1 inch.
- 10000 **Roses**, Teas, Hybrid Teas and Climbers, all grafted very low on Manetti roots. Field grown.
- 6000 **Biota Aurea Nana**, sizes 18 inches up.
- 10000 **Biotas and other Conifers**, 12 inches and up. Conifers can be balled or shipped with naked roots.
- 25000 **Chinese Arborvitae Seedlings**, 2 and 3 year, 6 inch to 3 ft. sizes.
- 5000 **Muscadine Grapes**.
- 20000 **Trellis Varieties Grapes**.
- 70000 **Camphor Trees**, sizes 1 to 3 ft.
- 3000 **Pot Grown Eucalyptus**, sizes 3 to 5 ft.
- 4000 **Oriental Plane**, sizes from 4 to 12 feet.
- 3000 **Texas Umbrella**, sizes from 4 to 8 feet.
- 2000 **Oleander**. Field grown. 3 to 5 ft. sizes.

A general variety of Orange and Grape Fruit Trees.  
Could also supply limited quantities of general list of Fruit and Ornamental Trees to be used to fill in with orders.

*Stock is fine and will be sold at Right Prices.*

**The Griffing Brothers Company**  
JACKSONVILLE, FLORIDA



# NURSEYMEN AND FLORISTS

looking for stock can find largest assortment in the United States at the

## Painesville Nurseries

Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses,  
Vines and Plants, Grapes, Gooseberries, Small Fruits, Bulbs, Seeds,  
Palms and other tender Greenhouse Plants

Have large stock stored in frost-proof cellars that can be shipped at any time  
desired; switch from N. Y. C. lines direct into our packing house; can load without  
exposure. Unsurpassed facilities for handling orders large or small.

CATALOGS AND PRICE LISTS FREE



BARBERRY THUNBERGII

### A FEW SPECIALS WHILE THEY LAST :

STANDARD PEARS in assortment, DUCHESSE DWARF PEARS, BOURGEAT QUINCE,  
PRUNUS PISSARDI and TRILOBA, CUTHBERT and other Raspberries,  
CONCORD and other GRAPES

### OUR SPECIALTIES ARE

Roses, H. P. Moss, Ramblers, Climbers, etc., Peaches, Pears, Plums, Cherries,  
Ornamental Trees and Shrubs in car lots, Weeping Mulberries, Elm and Ash,  
Clematis, Ampelopsis, Paeonies, Hydrangeas, Bush and Tree Perennial Plants.

No Trouble to Price your List of Wants. 59 Years 1200 Acres 44 Greenhouses

## THE STORRS & HARRISON CO.

PAINESVILLE, OHIO



PLANT FOR PROFIT

## Berberry Thunbergii Seedlings

\* \* \*

### California Privet

2 years, cut back, a fine lot

—and—

### A General Line of Nursery Stock

will be shown in our bulletins issued frequently from January on during shipping season, but remember, WE DO give you good thrifty stock, good grading, good packing.

\* \* \*

## C. R. BURR & Co.

MANCHESTER, CONN.

A good assortment of stock is offered in our January Bulletin, not a complete assortment, because we do not grow all kinds of stock; we can't. We grow only the things that we can produce in such quality and quantity as will make our specialties known to the trade for their superior excellence and reasonable price. Our friends say we grow **ROSES, CLEMATIS, TREE HYDRANGEAS, TREE LILACS**, and a few other specialties that are very good, and quite out of the ordinary. Stock very suitable in fact, for use in high-class retail orders. If you fail to receive a copy of our January Bulletin, let us know about it, and we will send another. You and we are losing something by your not having one. Drop us a line and let us tell you about our Spring stock.

## Jackson & Perkins Company

WHOLESALE ONLY

NEWARK, NEW YORK

### SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY  
PEACH PLUM

A Fine Block of  
Own Root Roses

ORNAMENTAL TREES SHRUBS  
BERRIES CLEMATIS  
EVERGREENS PEONIES PHLOX  
PYRAMIDAL and STANDARD  
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists  
and earload lots.

## W. & T. SMITH COMPANY

GENEVA, N. Y.

63 Years

700 Acres

## Berckmans' Specimens

We never call a tree or plant a "specimen" until it really has earned the title. Our evergreens are transplanted, sheared and root-pruned, each one getting just the proper attention to make it a really handsome and serviceable specimen. It *costs* more to produce such, but it's *worth* it—to us, to you and to your customers.

### Your Trade Will Be Pleased With Them

We offer a select but limited stock at wholesale this year. We call attention to our *Biotas*—*Aurea Nana*, *Aurea Conspicua*, and *Japonica Filiformis* (see illustration); *Retinospora*, *Thuya*, and *Juniper*—all in popular sizes for the trade.

Our Deciduous Shrubs include *Exochorda*, *Lilac*, *Spiraea*, *Althaea*, *Deutzia*, *Philadelphus*, and a very choice stock of *Teas' Weeping Mulberry*.

Broad-leaved Evergreens—*Azalea Indica* (Home-grown Plants) *Magnolia Fuscata*, *Aucuba*, *Ligustrum*, and *English Laurel*. Among our fruits, we direct particular attention to our clean, thrifty *Peach Trees*, of which we offer the the leading sorts.

### WRITE FOR PARTICULARS NOW

Tell us what you need, quantity, etc., and we will quote lowest price possible. Write early and get the best selections from our stock.

### P. J. Berckmans Co.

INCORPORATED

Fruitland Nurseries  
AUGUSTA, GEORGIA

Established 1856. Over 450 acres in  
Nursery.



Biota Japonica Filiformis.

CONIFERS  
BROAD-LEAVED  
EVERGREENS  
DECIDUOUS  
SHRUBS  
WEEPING  
MULBERRY  
PEACHES  
OTHER FRUITS

## The Best Tree Digger on Earth



Used and Recommended by Leading Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

**Stark Bros. Nursery & Orchards Co.**

LOUISIANA, MO.

It would be mighty easy to grow "Hill Quality" evergreens by letting them stand in the same beds where we sowed the seed, but such stock as we pride ourselves on doesn't come that way.

Our method is to transplant frequently, starting with the time the little fellows are hardly bigger than grass-blades—and you ought to see the roots such a tree develops! The intelligent care that

## Hill's Transplanted Young Evergreens

get in their "early childhood" makes them a valuable proposition for you if you are doing any business at all in evergreens or want to begin. We are Evergreen Specialists, as you'll promptly realize when you see our big Nurseries practically given to this one thing.

We have been at it for over fifty years; we have particularly good facilities, and we specialize on seedlings, and young transplants for nurserymen's and dealers' use, lining out, etc. There's an increasing demand for this sort of stock, and it will pay you to look into it. Write us about your wants, and get our Catalog.

**THE D. HILL NURSERY CO., Inc., Evergreen Specialists**

D. HILL, President

Box 401, DUNDEE, ILLINOIS

**L. Spaeth** **BERLIN**  
Baumschulenweg  
GERMANY

## Largest Nurseries in Europe

2000 ACRES

FOUNDED 1720

### HARDY TREES AND SHRUBS

1. Our nurseries lie in a colder climate than the French, Dutch and English nurseries—
2. We grow all the stock we sell—
3. Moderate prices. Catalogs free—
4. When in Europe come and see our nurseries—

## Willis Nurseries

OFFER A GENERAL ASSORTMENT  
OF NURSERY STOCK

Apple, Peach, Cherry

Kieffer Pear

Red Dutch Currants

Silver Maple Shade Trees

Catalpa Speciosa Seedlings

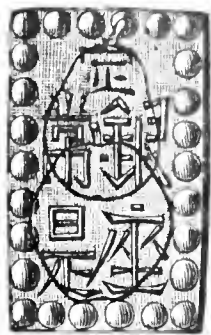
Apple Seedlings and

Japan Pear Seedlings

**A. Willis & Co.**

OTTAWA, KANSAS

# Heikes --- Huntsville --- Trees



Huntsville  
Wholesale Nurseries  
Huntsville, Ala.  
JESSIE S. MOSS, Prop.

We offer for Spring of 1913  
in large quantities as usual:

## SPECIALTIES

**APPLES**—Commercial varieties, one and two year, in large supply. As fine in quality as ever grown.  
**PEARS**—Kieffers, one and two years old. A much smaller crop than heretofore.  
**CHERRIES**—On Mazzard. Two year, Bing, Lambert, Napoleon, Black Tartarian.  
**CHERRIES**—On Mahaleb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.  
**PEACHES**—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.  
**ROSES**—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.  
**PRIVET**—Amoor River (South). Retains its foliage longer and holds its color better than California Privet.  
**PECAN SEEDLINGS**—Huntsville grown from selected nuts collected along the Gulf Coast. Thin shell.

See Price List for Particulars.

Address, HUNTSVILLE WHOLESALE NURSERIES  
HUNTSVILLE, ALA.

## BOBBINK & ATKINS

World's Choicest Nursery and Greenhouse Products

EVERGREENS and CONIFERS,  
in several hundred  
kinds and varieties

PALMS and BAY TREES by  
the thousands

FRUIT TREES,  
home-grown, imported,  
DWARF and TRAINED

SMALL FRUITS, in all  
kinds and varieties

NUT TREES, profitable  
kinds

OLD-FASHIONED, Hardy  
FLOWERING PLANTS, in  
thousands of kinds and  
varieties

PAEONIAS, IRIS, PHLOX  
FERNS,  
and HARDY GRASSES

KITCHEN  
HERBS and ROOTS

RUTHERFORD PARK LAWN  
GRASS SEED

AUTUMN BULBS, Dutch,  
French and Japanese kinds

Interior and Exterior  
DECORATIVE PLANTS, in  
a large variety

PLANT TUBS, in all shapes and  
sizes. Ask for special list

VISITORS to our nurseries  
are always welcome

SEND IN YOUR LISTS FOR  
QUOTATIONS

ROSES, in all kinds  
and varieties

RHODODENDRONS, Hardy,  
ENGLISH HYBRIDS,  
Maximum and Catawbiense

BOXWOOD, in all shapes,  
forms and sizes

HARDY AZALEAS, in all  
colors and varieties

HEDGE PLANTS, in all  
popular kinds

FLOWERING SHRUBS, in  
bush and standard forms  
in hundreds of kinds  
and varieties

SHADE TREES, in hundreds  
of useful and attractive  
varieties

MAGNOLIAS and other  
FLOWERING TREES

WEeping and STANDARD  
TREES, in many varieties

JAPANESE MAPLES, in all  
varieties and colors

HARDY TRAILING VINES  
and CLIMBERS

HARDY VINES and CLIMBERS  
in pots

SPRING and SUMMER  
FLOWERING BULBS, ROOTS  
and PLANTS

Nurserymen, Florists and Planters  
RUTHERFORD, N. J.



## SMALL STOCK FOR LINING OUT

The heavy sales of this small stock has reduced our supply considerably, but we still have quite an assortment to offer. Send for a copy of our revised list.

## Fruit Seeds and Seedlings

We have the following seedlings remaining:

3300 APPLES	2/16 to 3/16 in.
24600 MAHALEB CHERRY	5 to 8 m/m
20000 MAHALEB CHERRY	3 to 5 m/m
24150 MAZZARD CHERRY	5 to 8 m/m
5000 MAZZARD CHERRY	3 to 5 m/m
4000 FRENCH PEAR	5 to 6 m/m
4000 FRENCH PEAR	6 to 10 m/m
20000 FRENCH PEAR	3 to 5 m/m

Send for prices, advising quantities wanted. We also have a quantity of French Crab Apple Seed to offer. Ask for prices.

**WHOLESALE TRADE LIST.** Our Trade List for Spring 1913 is ready. If you have not received a copy send for one at once. It will be of interest to you.

**RAFFIA.** We offer various brands of Raffia representing the best in quality and price. Send for list.

**Thomas Meehan & Sons**  
Wholesale Nurserymen and Seedsmen  
DRESHER, PA.



## BRIDGEPORT NURSERIES

OFFER A GENERAL ASSORTMENT  
OF NURSERY STOCK

Apple, Catalpa Speciosa Seedlings  
Shade and Ornamental Trees

IN LARGE QUANTITY

WRITE FOR PRICES

**C. M. HOBBS & SONS**  
BRIDGEPORT, IND.

# Tree Protection

SCALINE will protect them all seasons of the year.

SCALINE is an oil and sulphur composition, a scalcide, insecticide and fungicide combined—three in one—and it will destroy San Jose, oyster shell, cottony maple, tulip scale, aphids, red spider, thrips, mealy bug and all sap sucking insects.

SCALINE is composed of a high grade petroleum oil and the properties of our fungicide Fungine, thus making it equally effective for the control of various fungi.

SCALINE is used at the strength of one part to twenty parts water for scale; one part to fifty parts for other sap sucking insects. It is readily soluble in water, requires no mixing, and containing no sediment can be applied through the finest spray nozzle.

SCALINE may be used as safely in the growing as in the dormant season. It is an all year round spraying material.

Gallon, \$1.50

Fifty gallons, \$37.50

Ten gallons, \$10

We believe that in SCALINE we have one of the best spraying materials on the market today for general spraying of trees, shrubs and hardy plants. We feel confident that a trial would make you a regular user of this product.

## Aphine Manufacturing Co.

M. C. EBEL, General Manager

Manufacturers of Agricultural Chemicals

MADISON, N. J.

"APHINE"  
Insecticide

"FUNGINE"  
Fungicide

"VERMINE"  
Vermicide

# FOREST TREES FRUIT STOCKS

SHIPMENTS OF OVER 200  
MILLION OF TREES  
ANNUALLY

LARGEST  
FOREST TREE  
NURSERIES  
IN EUROPE

Please write for Catalogue and  
Forest Planter's Guide to our  
American Representative:

OTTO HEINECKEN

Whitehall Bldg. 17 Battery Place  
NEW YORK



## J. HEINS' SONS

HALSTENBEK No. 152

Near HAMBURG, GERMANY

## Oriental Planes All Sizes From 1 1/4 to 2 1/2 Inch Caliper

Double Flowering Peaches  
Double Flowering Japan  
Cherries, Weeping Japan  
Cherries, Flowering Apples  
Asparagus, strong 2 years  
Large and complete assortment of Flowering Shrubs

### Hoopes, Bro. & Thomas Co.

MAPLE AVENUE NURSERIES  
WEST CHESTER, PA.

PHILADELPHIA

OFFICE:

222-3-4-5 Stephen Girard Bldg.,  
21 So. Twelfth Street

Have you seen and examined the quality and finish of our

## Rawhide Brand of Shipping Tags and Tree Labels

printed or plain, strung or wired?



This stock is especially adapted to the most severe usage, being thoroughly waterproof & weather-proof. "Once used, always used."

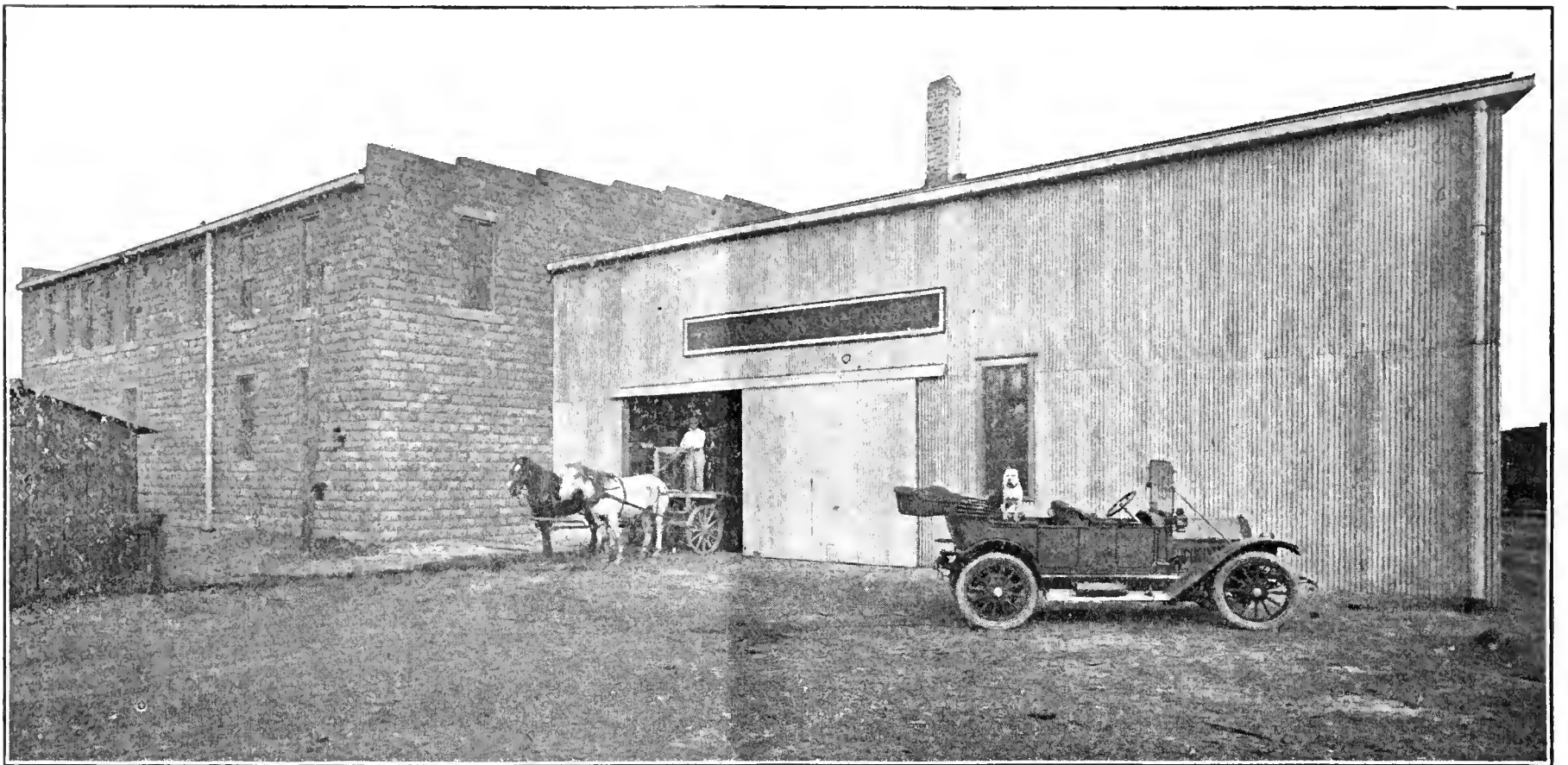
Send for samples and prices. Our reference are the largest nursery men in the United States.

## The Denney Tag Co.

WEST CHESTER, PENNSYLVANIA



THIS \$10,000.00 building was built and is used exclusively for the grading and handling of Apple and Pear Seedlings. We have shipped this winter over twelve million Apple and Pear Seedlings from this building. Cars are set in the building and seedlings are loaded during the winter without the least exposure.



We have several hundred thousand Apple Seedlings yet on hand---100,000 3-16 and all up-branched roots, 400,000 special grade 3-16 and all up-short roots, and about one million strong-grade No. 2. Also 40,000 Japan Pear Seedlings No. 1. We do not carry over any seedlings in cold storage. We will sell these seedlings in the next thirty days, or will burn them up and get ready for next year's crop. We will make very low prices on any of these seedlings. Wire night letter at our expense for quotations and samples.

# F. W. WATSON & CO.

TOPEKA, KANSAS

# The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

Vol. XXI.

ROCHESTER, N. Y., APRIL, 1913

No. 4

## LOSS OF VITALITY IN ROSES AND HOW TO PREVENT IT

By **ANTOINE WINTZER** of The Conard & Jones Co., Dean of the Rose Growers of America

It is well known among thoughtful propagators that there is a loss of vitality in many varieties of roses, and why such a condition exists. The causes are numerous.

In the first place, there are too many varieties to contend with, a great many of the new introductions are poor field growers in our Northern climate, and will only make satisfactory field growers in the Southern and Pacific coast states.

We have, however, a great many good old time roses that have been propagated for the past 40 or 50 years, some of these were old roses when the writer was a boy. The complaint is, that they are losing vitality, the reason is that they have been propagated with the main object of increase in numbers, their natural requirements being entirely ignored. Roses are not short lived plants when grown in good soil, and in a climate favorable to their requirements. When we start and continue to propagate and treat them as hardy shrubs, and not as exotic plants, their vigor will be retained, and our Hermosa, Jacqueminot, and other old favorite varieties will remain as vigorous as they were half a century ago. How can we do this is the question?

First secure healthy and vigorous field grown plants to propagate from. Use good healthy wood only for cuttings. If in a section of the country where you can root them outside from hard wood cuttings, there will naturally be no deterioration in the stock, as only the best matured wood will root from hard wood cuttings, with few exceptions. The exceptions are in the hardy Wichuriana hybrid class, these root very freely.

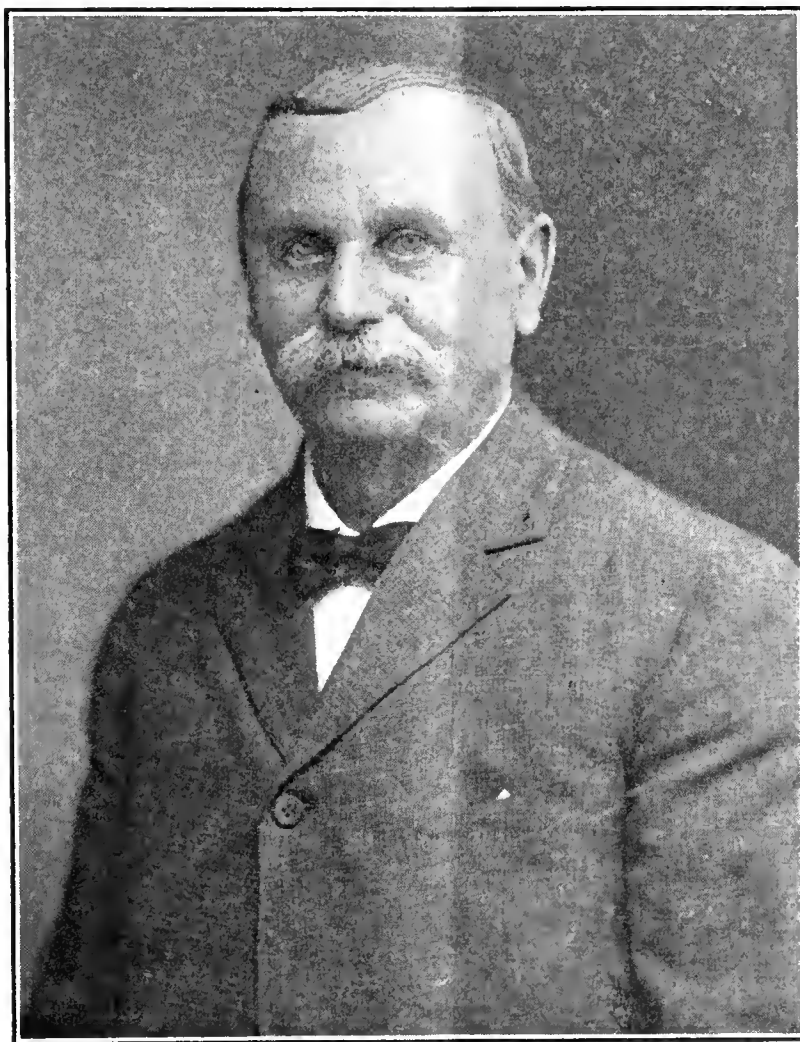
The Northern propagator can seldom secure good field grown wood of the Tea, Hybrid Tea and Hybrid Perpetual class for propagating with any certainty of success. He

naturally grows his stock plants under glass, and in pursuing this method his young plants will gradually degenerate, **unless** he continually renews his stock plants.

Nearly all varieties and classes of roses that fail to make a satisfactory field growth in the Northern states, usually prove very satisfactory growers in the Southern and Pacific States, and in some of those favored localities remarkable results have been obtained, and one year old own root roses grown as heavy as the best imported budded stock. I am, and always have been a strong advocate of own root roses for our American climate. The rose originators, at present, are adhering too close to the Hybrid Tea class, only a limited number of varieties in this class are good field growers in our climate, although all right for the cut flower grower under glass.

From the introduction of the Hybrid Wichuriana and Rambler classes the Northern nurseryman can select good material for field planting, in these there is no noticeable deterioration, and one can safely line out a plantation in Spring with small field-grown cuttings with the assurance of having good plants by fall. Such varieties as Dorothy Perkins, Minnehaha, Hiawatha, Gardenia, and the peerless Excelsa or Red Dorothy Perkins, Dr. W. Van Fleet, Silver Moon, Farquhar, and others will grow from three to seven feet, and sometimes more the first season. American Pillar

(Continued on page 137)



ANTOINE WINTZER



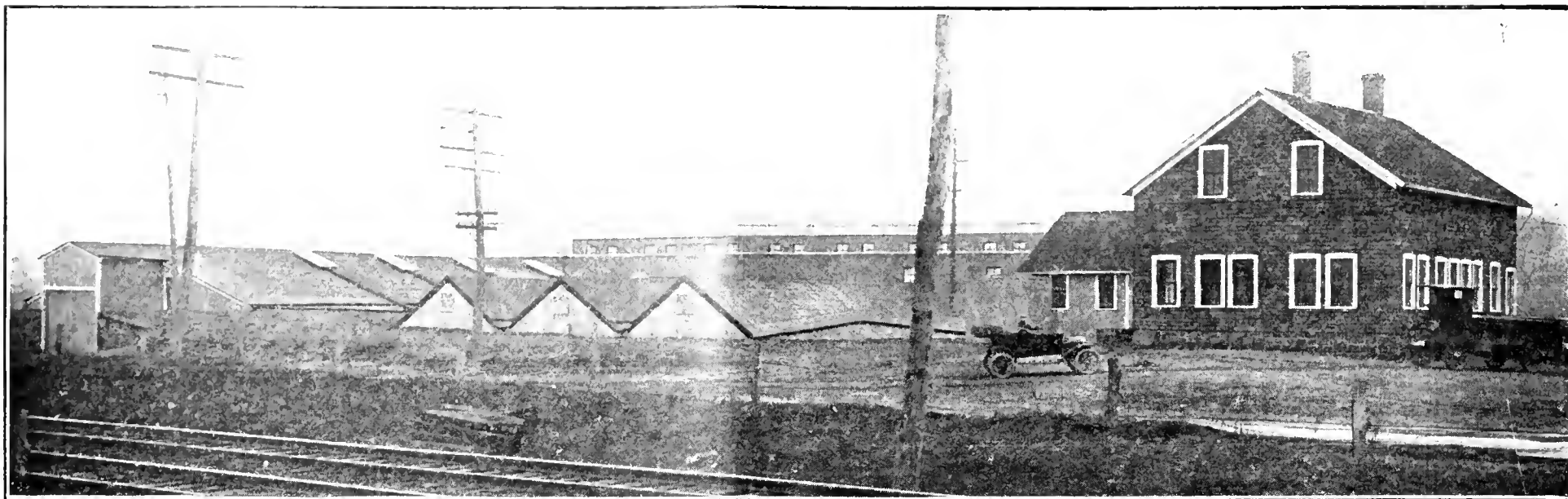


FIG. 1. BARNES BROS. NURSERY CO'S OFFICE, STORAGE AND PACKING HOUSES

## DESCRIPTION OF NEW PACKING AND STORAGE HOUSE OF BARNES BROS. NURSERY CO., YALESVILLE, CONN.

By E. N. & R. E. SPAULDING, Architects

In building the new storage warehouse for the Barnes Brothers Nursery Company, the prime object of the engineers was to erect a building which would eliminate one of the nurseryman's greatest troubles by being as nearly as possible proof against all outside changes in temperature and humidity. Consequently, in the selection of all materials and types of construction, the insulating factor was the first test.

Hollow terra-cotta tile was the material selected for the construction of the walls. The Denison Interlocking tile was chosen as the horizontal air chambers in this type of tile give

less chance for the circulation of air than do those types of tile having the vertical air spaces. This tile has a further insulation advantage in the fact that there are no unbroken mortar joints running entirely through the wall. Figures 4, 5, and 6 show cross sections of walls of varying thickness built of these tile. In the Barnes Brothers warehouse a 12 inch wall was used, which gave five separate air spaces in the thickness of the wall.

The roof of this building, as may be seen by reference to Figure 3, is of reinforced concrete construction, with terra-cotta filling blocks. The insulation of the roof is accom-

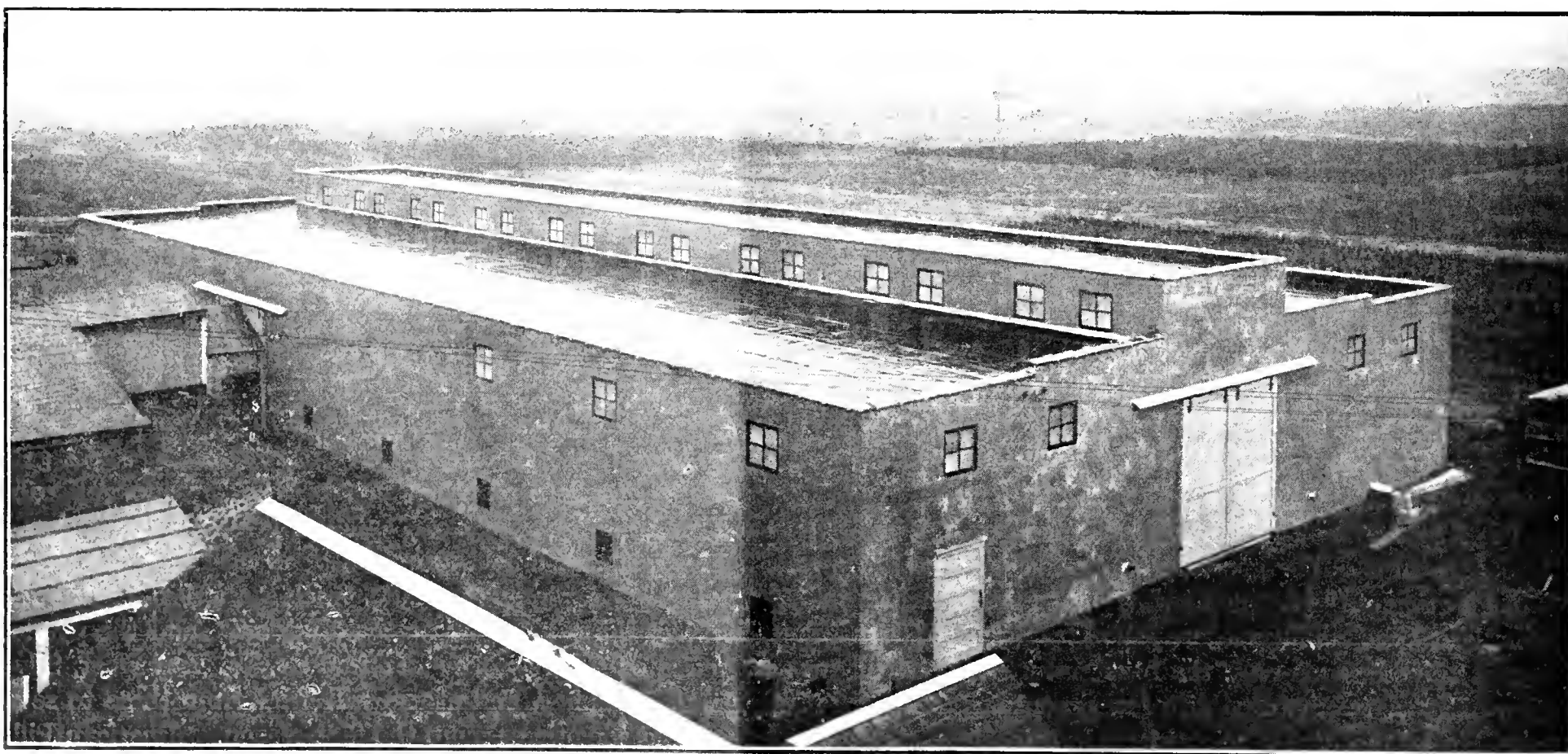


FIG. 2. NEW STORAGE AND PACKING HOUSE OF BARNES BROS. NURSERY CO.





plished by the use of a special roofing composed of two layers of hairfelt, each one-fourth inch thick covered with a regular five-ply, built-up asbestos roofing. Particular pains were taken to make the connection between the roofing and the walls as nearly perfect as possible from an insulation standpoint.

The roof is supported by four and one-half inch wrought iron pipe columns spaced 15 and 17 feet apart. This spacing allows ample room for free access to all parts of the warehouse by team.

All window, ventilation, and door openings are so constructed that there are two closing panels. Between these two panels, there is a tightly confined air space, which serves as an insulator. In the windows, the outer of these panels, is a double-glazed sash, having a one inch air space between the two layers of glass. All sash and frames are of Toney metal. The inside shutters are so arranged on pivots and hinges that they may be swung open for ventilation.

In the main wall near the ground are ventilators, which are similar in construction to the windows except for the fact that fire doors are used for both inside and outside shutters.

The air in the building may be changed very quickly by opening the windows and shutters in the monitor and in the ventilators at the bottom of the main wall.

The same scheme of insulation as used for the windows was carried out in the door openings. Here two sets of doors were used. The outer doors are of well seasoned cypress built up in two layers with insulating felt packing between. The inside doors are regulation Underwriters fire doors three inches thick.

In addition to the fact that this building practically insures its contents against all injury from changes in the outside temperature and humidity, it also is absolutely fire-proof. No exposed wood-work or other combustible materials were used in the construction.

## CAMPAIGN FOR MEMBERS AMERICAN ASSOCIATION OF NURSERYMEN

James McHutchison, the Chairman of the Membership Committee of the American Association of Nurserymen is making a systematic campaign for new members. He recently sent out a large number of letters of which the following is a copy and it is to be hoped that his efforts may be crowned with success. It is certainly a reflection on the nurserymen of this country that an organization which is doing so much for every individual nurseryman should be supported by the few who are present members of the Association and it is to be hoped that this effort on the part of Mr. McHutchison may be the means of bringing a large number of nurserymen to a sense of their duty to their fellows. The American Association of Nurserymen should have a membership of at least one thousand.—EDITOR.

Dear Sir:

Have you ever asked yourself what you are missing by not being a member of the AMERICAN ASSOCIATION OF NURSERYMEN? Perhaps you are waiting to be invited, so here and now, I extend to you a cordial invitation to join our National Organization.

Every live, ambitious nurseryman should become a member. The Association was organized in 1875 for the promotion and protection of nursery interests throughout the 48 States and as a member you will be entitled to all its benefits and advantages.

The Tariff Committee has been successful during the past few years in securing a tariff equitable and satisfactory to Nurserymen. They have had the duty upon French Fruit Stocks made per 1000, thus doing away with all the controversies over valuation that previously prevailed. They recently visited Washington and expect to prevent the threatened Tariff reduction. The work of this Committee has been of immense value to all Nurserymen.

The Transportation Committee has had Freight classifications defined, freight rates reduced. They have caused the railroads to give carload rates where nursery products were formerly paying less carload rates in carload lots. The work of this Committee has saved more than the membership fee to every Nurseryman in the United States.

The Legislative Committee, under the able leadership of Wm. Pitkin, has prevented much unwise and unfair State and Federal Legislation from becoming law, and now are testing the constitutionality of several State laws which are injurious and unfair to nursery interests. You are today receiving the benefits of the work of these Committees, but by not being a member of the Association you are not paying your fair share of the expense.

The Committees upon Publicity, Root Galls, Standard grading, etc., have done and are doing equally good work. Like the watchman on the tower, these Committees must constantly be on the alert, for there is no limit to the necessity for eternal vigilance.

All that has been accomplished has cost the Association thousands of dollars in legal, travelling and other legitimate expenses. Every Nurseryman in the United States shares in these benefits—he can't help it, and we should all be willing to lend practical help and financial support by becoming a member of the Organization, the dues of which are \$5.00 per year.

Each member gets a Badge Book about June 1st each year, also a badge number which he wears at Conventions so that his customers recognize him by his number. The Badge Book is worth more than the membership fee to every progressive Nurseryman. He also gets a copy of the annual report of each Convention containing a stenographic report of all discussions, reports of Committees, speeches and

papers. The Association's telegraphic code will save you many dollars.

Write your name and address plainly on enclosed application blank, pin your check for \$5.00 or a \$5.00 bill to it and mail it today in enclosed envelope. Official receipt, Badge Book, badge, etc., will follow in due course.

Sincerely yours,

JAMES McHUTCHISON,  
Chairman, Membership Committee,  
17 Murray St., New York.

## LOSS OF VITALITY IN ROSES AND HOW TO PREVENT IT

(Continued from page 133)

is in a class by itself. Climbing American Beauty also, and no one should forget the Christine Wright and many others.

The Rugosa class and its hybrids will prove of great value to the Northern nurseryman, they are good growers and remarkably healthy.

So with the best material to select from, the future of the rose outlook is bright, as the nurseryman has ample material to select from, as well as the grower for cut flowers.

## BULLETINS OF INTEREST TO NURSERYMEN

NOTE.—The station publications noted in this list are not distributed by the Department of Agriculture, but can usually be obtained, as far as the supply will permit, by applying to the stations issuing them.

CALIFORNIA STATION, Berkeley, T. F. Hunt, Director.  
Commercial Fertilizers. By J. S. Burd. (Bulletin 232, pp. 399-457.)

Analyses and valuations of fertilizers inspected by the station during the fiscal year ended June 30, 1912, are reported.

MARYLAND STATION, College Park, H. J. Patterson, Director.  
Increasing the Durability of Fence Posts. By F. W. Besley. (Bulletin 163, pp. 243-262, figs. 4.)

Experiments in coöperation with the Forest Service of this department in treating fence posts of different kinds of wood with creosote are reported.

## NEW ENGLAND NURSERYMEN'S ASSOCIATION FIRST ANNUAL MEETING

The First Annual Meeting of the New England Nurserymen's Association was held at Horticultural Hall, Worcester, Mass., Tuesday and Wednesday, February 25 and 26th, 1913.

Promptly at 1:30 o'clock, Tuesday afternoon, President Manning called the meeting to order and delivered his address, which was full of practical suggestions for the good of the organization.

The president then appointed the following committees: To audit Treasurer's Report, H. P. Kelsey, J. Kirkegaard, Charles Adams. Membership, Geo. C. Thurlow, Daniel A. Clarke, Chas. R. Fish. To nominate officers, A. E. Robinson, F. W. Spinney, C. R. Burr.

The first subject on the program was then taken up, Dr. H. T. Fernald, State Nursery Inspector in Massachusetts, gave a vigorous and practical address on the Laws, Rules

and Regulations governing Interstate shipments and Importations of nursery stock as related to the New England States, and particularly as to what is known as the "quarantined district." He was followed by Dr. W. S. Regan, who is in charge of the inspection work in Massachusetts, who stated that eighteen new pests had been received on imported stock so far this season.

Dr. Fernald gave a very interesting account of the hearing which was held before the Federal Horticultural Board, at Washington. Messrs. Burr and Hoyt gave an account of the inspection work in Connecticut. Messrs. Clarke and Greateon spoke for Rhode Island and Mr. A. P. Horne for New Hampshire. In the discussion which followed, it was brought out that New England seemed to be unduly advertised as a section of the United States where all kinds of pests originate, and it was recommended that steps be taken to counteract this injustice. Dr. Fernald was asked to assist, and it was moved that the president appoint a publicity committee to take up the matter and endeavor to influence the Agricultural press in our behalf. W. H. Wyman, North Abington, Mass., E. L. Coc, New Haven, Conn., and Daniel A. Clarke, Fiskville, R. I., were appointed such committee.

At 4:00 o'clock, Mr. H. P. Kelsey of Salem, Mass., spoke on "New England Transportation Problems." He gave a good description of the way shipments are being handled by Railroad and Steamship lines, both in and outside New England and showed how the present system of moving and tracing freight shipments is gradually breaking down. A spirited and profitable discussion followed.

At 6:00 o'clock, the annual dinner was served at Hotel Warren. There were thirty present and the hour was thoroughly enjoyed by all. Following the dinner, president Manning called for speeches on practical topics to which there was a general response. At 8:00 o'clock, a goodly number assembled at Horticultural Hall to hear Mr. Ernest L. Coe of New Haven, Conn., give his illustrated lecture on Japan, the public being invited. Mr. Coe gave a graphic description of the country and of its people. The pictures were exceptionally fine and clear, being thrown on a large screen. The true charm of Japanese Gardening was clearly illustrated. Mr. Coe was tendered a vote of thanks for his splendid lecture.

Wednesday morning at 10:00 o'clock the meeting was called to order by President Manning. The first item of business was receiving the report of the nominating committee and the election of officers for the ensuing year, which resulted as follows: President, Harlan P. Kelsey, Salem, Mass.; vice-president, John R. Barnes, Yalesville, Conn.; secretary, Charles Adams, Springfield, Mass.; treasurer, V. A. Vanicek, Newport, R. I. Executive Committee—the officers above and W. W. Hunt, Hartford, Conn.; C. H. Greateon, Providence, R. I.; A. P. Horne, Manchester, N. H.

Invitations to hold next meeting were received from Worcester, Mass., and Hartford, Conn. It was voted unanimously to hold our next annual meeting at Hartford, Connecticut, in February, 1914.

After some discussion it was voted that the membership committee be increased to seven, to include members from each of the New England States. Mr. C. R. Burr, Man-

chester, Conn.; Herbert Jackson, Portland, Maine; A. P. Horne, Manchester, N. H., and F. H. Horsford, Charlotte, Vt., were added to the committee.

Mr. Daniel A. Clarke, Fiskville, R. I., then gave his paper on "New Introductions and Plants Nurserymen Should Grow." Mr. Clarke gave a list and description of many new trees and shrubs which have been tested out at Arnold Arboretum, and of some recently introduced from China by Mr. Wilson. Mr. Clarke's paper was ably discussed by Mr. Heurlin, Mr. Kelsey, Mr. Breed and others.

Mr. John R. Barnes, Yalesville, Conn., spoke on "Winter Storage Houses." His experience in constructing storage warehouses of this character enabled him to give some very intelligent information on the subject.

At the afternoon session, Wednesday, Mr. Stephen Hoyt, New Canaan, Conn., presented the subject of "Moving Large Trees" with illustrations of his machines and appliances. His methods are thought to be most practical.

Mr. V. A. Vanieck, Newport, R. I., took Mr. Steven's place on the program, and spoke on the subject of propagation. He answered very intelligently the many questions which were put to him by the members present.

It was moved that the recommendation of the executive committee relative to the amendment of Article 4, of the constitution be adopted. A spirited discussion ensued and when the vote was taken, the measure adopted as follows:

"The members of this association shall be persons residing in, and engaged in the growing or selling of nursery stock in New England, and shall be approved by the executive committee."

Resolutions were passed thanking the Worcester Horticultural Society and Mr. Breed its president, for courtesies extended; Mr. Coe, for his entertaining lecture, and the retiring officers for their services.

On motion the meeting adjourned.

### HORTICULTURE AT THE PANAMA-CALIFORNIA EXPOSITION

People of this day are interested in the Art of Doing things. Still-life may do for the beginner in the studio, but strong men demand strong meat. They want action.

At the Panama-California Exposition, under the softest skies in the world, where the products that made famous the ancient land of Palestine flourish as they may have flourished in that other land in the Golden Age, the builders of this Exposition have adopted a new keynote for the guidance of all who shall participate in that event, and that keynote might be epitomized as *Action*.

All previous affairs which have borne the name of Exposition have shown still-life in every form. They displayed mountains of finished products—bolts of cloth, cans of corn, bales of goods of various kinds and innumerable products from many climes—but all more valuable in a warehouse than in a place where exhibits should convey a deep lesson and a lasting impression on those who went to see and learn.

In California there will be something different.

Perhaps it is due to the masterful men who are building the West that the tone permeating the whole structure

of the San Diego Exposition will be Power, Life, Action, Achievement—and they all spell the same thing, which is Success. Men like the President of the San Diego Exposition, Col. D. C. Collier, rise up when things are to be done. Great needs and great men answering the call to labor. And on the shores of the land-locked bay at the extreme southwesterly corner of the United States they are not only building an Exposition, but they are building a city and developing a surrounding empire. No wonder these men are giving the chief space in their Exposition to the Aladdin-like feats of Irrigation with its miracles of transformation to the varied phases of conservation of national resources, to reclaiming the waste places, to saving the forests and the hidden stores of coal and other minerals, to holding for their true owners the great energies pent up in river and waterfall. Fiction knows no tale so reeking with romance as the tale of the conquering of Nature and the bending of her forces to the service of Man.

This is the theme of the unique and unmatched Exposition that is being rapidly reared on the heights overlooking the Pacific, at the "first port of call in the United States, after passing through the Panama Canal."

In a land where history and tradition are so strongly tinged with the flavor of the Spanish conquistadores and the Spanish padres, it was scarcely less than an inspiration that the directors of the Exposition adopted the Spanish Renaissance as the type of architecture for the Exposition city. Reminiscent of the old Missions, this style is still sufficiently elastic to make it adaptable to all the needs of the Exposition. It is stately, and also substantial. It is solid and at the same time full of grace and beauty. It lends itself to the most elaborate decoration known to Moorish and Byzantine palaces and temples, and it is content with the most classical severity of line and coloring. With domes, towers, balconies and minaretes it will give satisfying diversity without sacrificing one jot to unity and harmony.

Most of the States of the Union and various foreign Governments have already signified their intention of taking part in the Exposition at San Diego, where the buildings are rising rapidly in the great public park that is being transformed into a wonderful bower of tropical trees and flowers to serve as a setting for the beautiful and stately buildings that will house the Exposition of Action and Achievement.



### LOUIS SPATH

A household name, not only in the nursery trade of Germany, but of Europe, and familiar also to many in the United States, Louis Spath has passed away full of honors. His nurseries at Berlin, Germany, count among the largest in Europe and the collections of trees, shrubs and plants have few equals. The model and extensive nurseries remain a tribute to his business acumen and abilities.



## PORTLAND CONVENTION ARRANGEMENTS

It has been definitely settled by the Committee on Arrangements, that the Multnomah Hotel, shall be the headquarters in Portland, Oregon, for the American Association of Nurserymen's Convention in June.

This hotel was selected after careful consideration by the Committee as being best adapted for the purpose. The building was opened a year ago and is centrally located, covering one entire city block. The entire second floor is devoted entirely to halls, banquet and committee rooms and entertainment space as well as large rooms especially adapted to exhibition purposes. There are also rooms for the ladies' entertainment committee to take care of the wives and daughters of the delegates, many of whom expect to take the trip to Portland.

The local florists of Portland have agreed to make a special exhibit of plants and flowers and are making every effort to produce an unusual and striking display.

The Pacific Coast Nurserymen's Association will hold their meetings on the same dates as the American Association of Nurserymen, and it has been arranged that the two Associations will hold joint meetings, one day being set aside for separate meetings when the official business of each association can be transacted. This will be the first joint meeting ever held by the American Association of Nurserymen, and it is expected that it will result in a most interesting and instructive gathering. The meetings will be presided over by both of the Presidents, Thomas B.

Meehan of American Association of Nurserymen and Albert Brownell of the Pacific Coast Nurserymen's Association.

Chairman Marsden B. Fox of the Passenger Transportation Committee reports that up to the present time some thirty members have signified their intention to join the party which will leave Rochester, N. Y., in a special Pullman sleeping car on June 12th at 5:20 P. M., via New York Central Lines, Burlington Route and Northern Pacific Railway. This is one of the most direct routes, and delegates may return by whatever route and at any time they may desire.

The Washington Nursery Co. have extended an invitation to the delegates to stop over at Toppenish, Washington, for the purpose of looking over their plant, city, and the surrounding country, and it has been arranged to sidetrack the special car for one day at that point in order to accept this invitation. The "Special" will reach Toppenish (if on time) at 3:30 A. M., June 16th. After breakfast, the delegates will be taken over the nurseries of the Washington Nursery Co., through the



FOURTH STREET, PORTLAND, OREGON

town and then by automobiles over the irrigable portion of the Yakima Indian Reservation. This is a body of land partly cultivated and the remainder in Sage Brush. It will illustrate the transformation from the raw land to the cultivated which takes place in one season as the water is applied. The drive will then circle through the town of Wapata, taking in smaller nurseries, crossing the river and



passing through the orchards in the vicinity of the Sunnyside Canal and covering a distance of from 35 to 40 miles, affording an opportunity to see one of the most interesting agricultural and fruit producing sections of Washington.

Dinner will be taken at Sunnyside, and the visitors will then return by train to Toppenish for supper and at midnight the "Nurserymen's Special" will leave on its way to the Coast, arriving at Portland at 10.30 P. M. on the 17th.

It is understood that many interesting trips and features are being arranged for the visitors after arriving at Portland, and while this trip to the convention will be a long one for the Eastern delegation, it is the intention of the Coast Nurserymen to see that they shall be well repaid for the trip.

The Trans-Continental Passenger Association have granted Summer Tourists rates for the round trip approximately as follows: From Boston, \$113.30; from New York, \$111.20; from Rochester, \$96.30; from Chicago, \$72.50; from St. Paul, \$60.00. If for return via California, add \$17.50.

Sleeping Car rates to Portland (one way): From Rochester, upper berths, \$14.40, lower berths, \$18.00; from Chicago, upper berths, \$12.00; lower berths, \$15.00.

With the outlook so promising for such a delightful and interesting trip, who would refuse to take it? Chairman Fox wants a few more delegates pledged so that he may charter a second car.

Delegates west of Rochester can make arrangements with Mr. Fox to join the "Nurserymen's Special" at some point along the route.

Mr. S. A. Miller writes the NATIONAL NURSERYMAN as follows:

"We Western Nurserymen are extremely anxious for a good attendance of the members of the American Association at the Portland meeting, next June. We expect many good things in store for them in the way of program and entertainment, and feel certain that all who will avail themselves of this opportunity to visit the great Northwest, will go home feeling well paid for the time and money spent."

### A NEW QUARANTINE

#### THE LID IS ON—PORTLAND

A conversation that took place, recently, on the streets of ROCHESTER.

Mr. Irving R. and Allen W. being the parties *in re*.

Irving—Good morning, Allen.

Allen—Morning, Irving.

Irving—What about the Portland Convention?

Allen—Have been pondering the proposition. It seems like a long ways to go, quite expensive too, I reckon, and business is a little slow this year.

Irving—O it is not so far. You were at Chicago when we met there. Well, it is not very far from Chicago, I reckon. It can't be much farther.

Allen—No, we board the 20th Century Limited here in the evening, wake up in Chicago next morning, then—let's see—yes, supper at Oma-yes Omaha, a little Indian Village on the bank of a creek, they call the Missouri, then breakfast at a mining town called Denver. This town, they tell me, has made some progress since 1876, but I guess it is not so much. Then we begin to go up the hill—what is that hill, Irving?—the Rocky—yet that's right—Well, we go up and up all day.

Irving (with astonishment)—Gee! Allen—that must be a dickens of a long hill.

Allen—Yes, Irving, *high* too, I have heard it is 11,000 feet high where we cross at Tennessee Pass.

Irving (with solemn emotion)—Say, Allen, can we hear the Heavenly Choir when we get up there?

Allen (very grave)—No Irving, I think not, but Dad Wallace has told me that you could hear the Angel Moroni blowing his horn, from the top of the East Spire on the Mormon Temple, down on the other side.

Irving—My, but that must be great!

Allen—Yes, all very wonderful—but as I was saying—we eat supper way up there in the clouds, then go down—down the West slope of the hill—all night.

Irving (Grabbing Allen's arm)—You don't mean it!

Allen—Mean what?

Irving—That it takes as long to go down the hill as it takes to go up it?

Allen—Yes Irving, it is very steep and the road is very tortuous—have to rough—lock the wheels on the engine—it goes through gorges, canons, along the winding banks of babbling brooks, over and under the raging, seething, torrential Engle and Grand Creeks, through long, dark tunnels and—

Irving (much agitated)—Stop, Allen, Stop! You are wandering, are you sure we would see all these wonderful things, if we go to *Portland*?

Allen—Yes, and much more, this is but a bagatelle of the wonderful things revealed to you all along the line of the Denver and Rio Grande R. R.

Irving—You spoke of a Canon, what is that?

Allen—A Canon is a very deep, dark passage through high, rough country, with Ribs of Granite, studded with gems of opal, gold and silver, sentinaled with hoary old grizzlies, cougars, bob cats and such domestic animals; and you have to lie on your back and look straight up to see out.

Irving—My, my, it must be very wonderful; say, we will have to go, won't we?

Allen—Where?

Irving—Portland.



HOTEL MULTNOMAH  
Nurserymen's Headquarters at the Portland Convention

Allen—Let's see, where did we break the journey, yes, we were going down the hill next morning we arrive at Salt Lake City.

Irving—Where is Salt Lake City, Allen? I most certainly have heard of that town.

Allen—Sure! That is quite a country village, situated in Utah on the edge of the Great American Desert, near the shores of America's Dead Sea and the River Jordan flows through it to the sea. This is the country in which Brigham Young led the Mormon people some years ago. In this town

Allen— Say, Irving, if you don't quit interrupting me, we never will get to PORTLAND, let's see, where did we get to Salt Lake—yes, in the morning well, then we "beat it" straight for PORTLAND, arriving there the next day.

Irving—How long does it take in all?

Allen—Four days and four nights, but that is nothing, we eat and sleep right on the cars, don't have to get off for meals or beds—just keep hitting the PAX all the time.

Irving—By George, to hear you talk, one would think you had made the trip; it certainly must be "out of sight."



VIEW IN J. B. PILKINGTON'S NURSERY, PORTLAND, OREGON

they have a Temple, which was fifty years building, cost \$2,000,000.00. They also have a huge Tabernacle, which seats 12,000 people, and many other things.

Irving—What is a Tabernacle, Allen?

Allen—My! Irving, you surely WILL have to go to PORTLAND. Why, a Tabernacle is a large egg-shaped building in which the Mormon people assemble every Sabbath afternoon to worship—and I have heard that Salt Lake has the finest hotel between New York and San Francisco. The Hotel Utah—cost \$2,000,000.00, and the Pacific Coast Association of Nurserymen held their annual meeting right in that fine hotel last June.

Irving—My, but that must be a pussy lot of duffers.

Allen—No Irving, Chicago is the farthest West I have ever been, but I have read some about the West. Did you ever read "Dead Eye Dick," or "The Last Stand of Setting Bull?" Wonderful pieces of fiction and give a very comprehensive knowledge of the West and its people. Then, too, I have talked a little about it, with J. B. Pilkington, you know he lives in PORTLAND,—when he is at home—but you can't go too much on what he says—speaking of Western Nurserymen, I think George C. Røeding, the Fig Man and Globe Trotter, is the most erudite and astute "Guy" I have met from that part of the country—he lives in California—Fresno—you know, when he is not chasing the Blastophagno over the Plains of Smyrna.



Irving—I have not had the pleasure of meeting either of the gentlemen of whom you speak, nor do I remember to ever have heard of them. But say Allen, getting back to the question of taking that trip to PORTLAND. I certainly would enjoy it, and I think it would be a fine thing to cross our Continent. You know, I really think we Easterners don't know enough about the West, their broad prairies, the granaries of the world, their fertile valleys, their mines, their mountains, rivers, lakes, cities, their commerce and the people. This PORTLAND trip would give the Eastern Nurserymen a broader view of their own country and every mother's son of us ought to take it; but, confound it, the expense is what I stall at!

Allen—Oh it won't be so much and the expense will be swallowed up in the continual round of pleasure that will be ours. Then listen, Irving, it has recently been "tipped off to me" that there is a fine old nurseryman out in that Western Country, they call Dady S. Lake, you may have heard of him, lives in Iowa, I think. Fine man, wears a fine suit of patriarchal whiskers, philosophical old cuss, made lots of money too, and for some reason, unknown to nurserymen, has not been separated from it. Well he has been reading his Bible and is wise to the fact that it is far easier for a camel to pass through the eye of a cambric needle than for a rich man to enter the Kingdom of—Nurserymen; so he has hit upon a plan of organizing a sort of Andy C. and John D. "Foundation" or Young Woman's Christian Association, to dispose of the major part of his fortune while he is still with us in the flesh. Now he has announced, in a quiet way, (very quiet) that he will try this plan out, by slipping sufficient funds to any Eastern Nurseryman, to make the PORTLAND trip in luxury who feels he cannot afford it himself. I understand he is a very unostentatious gentleman and retiring in disposition, but I shouldn't wonder if the matter was brought to his attention, by some such man as Pitkin or Dayton, if he wouldn't put up for the whole New York and Ohio Delegations, "Special" and all.

Irving—Good idea, let's appoint a committee to memorialize him at once, so he will have ample time in which to give so grave and important a matter mature and deliberate consideration, and I think it would be well to put Wm. P. Stark on the committee, for you know he is "past grand" on memorializing stately bodies on important subjects.

Allen—By George! if he should "fall to it" and "come across," wouldn't we make those fellows out there look like a ten cent piece with a hole in it—Wow!

Irving—Well Allen, it begins to look like we would all go. I wonder what the "Wild and Woolies" can put up for us in way of high class entertainment?

Allen—Am informed there will likely be some good stunts pulled off. Pilkington, the Great American Salmon Eater, will perform a few aquatic feats, such as poisoning with one foot upon the dorsal fin of a Columbia River salmon and ride the "Bird" across the Willamette River.

C. F. Lansing, the Quaker Nurseryman, whose face is a benediction to every one who looks upon it, will be on the Bridge with Mike Donald at the wheel, for a grand excursion up the Columbia, and many other good things, which time forbids our dwelling on at this meeting.

But probably one of the BEST entertainments will be a lecture by Dr. Kruckeberg, of Los Angeles, a noted scientific writer and most renowned all around WEEVETOLOGIST in the known world. This lecture is to be illustrated by stereopticon views, showing the alfalfa societies of California and Idaho, commanded by Governors Johnson of California and Haines of Idaho, running down the alfalfa weevil, and other bands of these noble Cohorts standing guard at all the commercial gateways to these states, their steel dripping with blood, ready to ruthlessly slay any weevil headed this way.

You know these two states and Arizona have gone "bug house" on the alfalfa weevil and have raised a very drastic quarantine against this little insect and I am wondering how you and Lake and Willis can go with us down through California and back across Arizona.

Irving (in great dismay)—How is that? We have nothing to do with alfalfa weevil.

Allen (looking mighty tearful like)—Yes, I know, but that does not enter into the question with these people, and I am told that the quarantine edict requires the Horticultural Commissioners of these states to meet all incoming trains at the border lines and fumigate every man's whiskers who has passed through Utah, Idaho or Wyoming.

Irving—What with?

Allen—Cyanide of Potassium, 98% pure.

Irving—But man, that would be very dangerous, as the fumes are certain death to anything breathing them and how in the "Sam Hill" would they go about fumigating that luxuriant suit of whiskers of A. Willis, for instance without killing him?

Allen—Yes, very true, that would be a very dangerous operation, but those fellows in California and Idaho argue that the life of a bewhiskered nurseryman is not to be compared, in value, to that of a straw or alfalfa hay—it is the weevil, that perchance may have lodged therein, that they are after.

Irving—Well I am game, and will take a chance, and I am going to that PORTLAND CONVENTION, whiskers or no whiskers.

Allen—Here too, Irving, and I am going to boost for it.

Policeman—Gentlemen, you will have to move on, you are interrupting traffic.

### THE PORTLAND CONVENTION

Much speculation is rife as to how many members of the American Association will meet their brethren on the Pacific Coast in convention next June. To those who hesitate on account of the distance we commend this extract from the official organ of the Association:

From "If such nurserymen"—to "time and money." From "The trip to the great," to "business of the future."

There is little need for us to expatiate on the beauties of Nature en route, but we can give just a hint of one feature that will both interest and instruct those who are fortunate enough to participate, viz. the day "stop-over" at Toppenish, Washington. The train will arrive early in the morning, the Nurserymen's "Special Car" will be side-tracked and the nurserymen become the guests of the Washington Nursery Co. In an auto trip of about forty miles, the party will view



the irrigable portion of the Yakima Indian Reservation with its first-class agricultural and fruit lands; various nurseries, and the fine orchards which lie on the bench lands under the famous Sunnyside Canal. Our host tells us that "the trip will be of utmost interest to those who wish to see the Yakima Valley in all its phases, including the matured bearing orchards." Dinner and supper will be served to the visitors and the car will be attached to the midnight train. Those who wish a copy of the "tentative itinerary" may write Mr. M. B. Fox, "Rochester Lithographing Co., Rochester, N. Y., or the Secretary, in the same city.

Secretary John Hall is rounding-up his members by means of a unique and stirring circular letter, and he reports that Mr. J. McHutchison, special committee to create new memberships, is prosecuting a lively campaign with encouraging results.

Members are urged to make up their minds regarding going and report to its secretary as quickly as possible.

APPLICATION FOR MEMBERSHIP IN  
AMERICAN ASSOCIATION OF NURSERYMEN

JOHN HALL, ..... 1913  
Secretary American Association of Nurserymen,  
204 Granite Bldg., Rochester, N. Y.

Find enclosed herewith the sum of ..... dollars in payment of the following:

Membership fee (\$5) for 1913.....	.....
Page advertisement in Badge Book.....	.....
(Size of type page 5 $\frac{5}{8}$ x 2 $\frac{5}{8}$ in.)	
Half page " " .....	\$3.00.....
Quarter page " " .....	\$1.50.....
Eighth page " " .....	\$1.00.....
Inserting furnished inserts \$1.00 extra.	
Inserts must not exceed 25 x 38—80 lb. basis.	
Extra badge (and book), for firms already having one membership, 50 cents each .....	.....

Total payment .....

Name.....  
(WRITE DISTINCTLY)

Address .....

PLEASE NOTE

Advertisers in the Badge Book should send copy for same soon as possible, even though May 15th is the latest that advertisements can be received.

This is VERY IMPORTANT if the Badge Book is to be mailed so as to reach members before they leave for the Convention.

Order for advertisement should invariably be accompanied by draft or money order to cover cost of same and also membership.

Copy should be plainly written—typewritten preferred, leaving nothing to be guessed at by us.

Where title of a firm has coupled with it the name of an individual, presumably the sole owner, order should state *which* is to be entered in the membership list.

If you have already paid membership fee, and now desire advertising space, please send order and copy for same.

SECRETARY'S OFFICE

GRANITE BLDG., ROCHESTER, N. Y.

My dear Sir:

March 19, 1913.

Do you realize that for thirty-eight years the AMERICAN ASSOCIATION OF NURSERYMEN has labored for the promotion and protection of the nursery interests of these United States? There is not a man engaged in the business, whether on a large or small scale, who has not enjoyed the benefits and advantages of the work of this Association. Therefore, we submit to you the query if it is not reasonable to expect that every live, ambitious, self-respecting nurseryman should become a member? If you are not already "on the list" you do not know what you are missing. The omission is doubtless simply an act of pure thoughtlessness. That is why we bring these things to your remembrance. If you were a member in 1912, of course you will renew.

A few things which the Tariff Committee of the Association has accomplished:

Secured a tariff equitable and satisfactory to nurserymen.

Had the duty upon French Fruit Stocks made per 1,000, doing away with the old time controversies over valuation.

The Committee recently visited Washington, and expects to prevent the threatened tariff reduction.

The work of this Committee has been of immense value to nurserymen.

The Transportation Committee is also a wide-awake part of the Association, and has saved more than the membership fee of every individual nurseryman in the land. Hear!

It has had classifications defined and freight rates reduced.

It has caused railroads to give carload rates for less than carload lots, etc.

The Legislative Committees have prevented much unwise and unfair legislation, both State and Federal; and at this time are testing the constitutionality of several State laws which operate injuriously to our business interests.

Now, all that has been accomplished has cost this Association thousands of dollars in legal, traveling and other legitimate expenses. You are today reaping the benefits resulting from this work, and the withholding of your membership, after learning these facts, could only be construed as a refusal to bear some share of the expense.

Further, the Committees on Publicity, Root Gall, Standardization of Grades, etc., have done and are still doing equally good work.

Like the watchman on the tower, these committees must be constantly on the alert, for there is no limit to the necessity for eternal vigilance.

Every member gets a copy of the Badge Book about June 1st of each year; also a Badge containing his number which he wears at the Convention that he may be easily recognized by his customers. He also gets a copy of the Annual Report, containing a stenographic report of all papers, discussions, reports of committees, etc. Why the Association's Telegraphic Code will save you many dollars.

Does all this appeal to you as a Nurseryman? If so, please fill out the enclosed application and note terms for advertising in Badge Book and place yourself in communication with

There is no time like NOW! Very truly yours,

JOHN HALL, Secretary.

# The National Nurseryman

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THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.

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Editor ..... ERNEST HEMMING, Flourtown, Pa.

The only trade journal issued for Growers and Dealers in Nursery Stocks of all kinds.  
It circulates throughout the United States, Canada and Europe.

Official Journal of American Association of Nurserymen

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

## SUBSCRIPTION RATES

One year, in advance.....	\$1.00
Six months .....	.75
Foreign Subscriptions, in advance.....	1.50
Six months .....	1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Rochester N. Y.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Address, Editor, Flourtown, Pa.

Entered in the Post Office at Rochester, N. Y., as second-class matter.

ROCHESTER, N. Y., APRIL, 1913.

## AMERICAN ASSOCIATION OF NURSERYMEN

PRESIDENT—Thomas B. Meehan, Dresher, Pa.; vice-president, J. B. Pilkington, Portland, Ore.; secretary, John Hall, Rochester, N. Y. treasurer, Chas. J. Maloy, Rochester, N. Y.

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TRANSPORTATION—Chas. M. Sizemore, Louisiana, Mo.

TARIFF—Irving Rouse, Rochester, N. Y.

LEGISLATION EAST OF MISSISSIPPI RIVER—Wm. Pitkin, Rochester, N. Y.

LEGISLATION WEST OF MISSISSIPPI RIVER—Peter Youngers, Geneva, Nebr.

CO-OPERATION WITH ENTOMOLOGISTS—L. A. Berckmans, Augusta, Ga.

PROGRAM—Samuel Miller, Milton, Oregon.

EXHIBITS—F. W. Power, Orenco, Oregon.

ARRANGEMENTS—John Hall, Rochester, N. Y.; J. B. Pilkington, Portland, Ore.

PUBLICITY AND TRADE OPPORTUNITIES—W. P. Stark, Louisiana, Mo.; Jefferson Thomas, Harrisburg, Pa.; Orlando Harrison, Berlin, Md.; C. M. Griffing, Jacksonville, Fla.; G. C. Roeding, Fresno, Cal.; H. D. Simpson, Vincennes, Ind.; James M. Irvine, St. Joseph, Mo.

MEMBERSHIP—James McHutchison, New York City.

## STATE AND DISTRICT ASSOCIATIONS.

American Nurserymen's Protective Association—President, J. W. Hill, Des Moines, Ia.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.

American Retail Nurserymen's Protective Association—President, Charles J. Brown, Rochester, N. Y.; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.

Association of Oklahoma Nurserymen—President, J. A. Lopeman, Enid, Oklahoma; secretary, C. E. Garee, Noble, Oklahoma.

California Association of Nurserymen—President, Frank H. Wilson, Fresno, Cal. Secretary, H. W. Kruckeberg, Los Angeles, Cal.

Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.

Connecticut Nurserymen's Association—President T. E. Burroughs, Deep River, Conn.; secretary, F. L. Thomas, Manchester, Conn.

Eastern Association of Nurserymen—President, Wm. C. Barry, Rochester, N. Y.; secretary-treasurer, William Pitkin, Rochester, N. Y. Meets annually in January.

Idaho Nurserymen's Association—President, W. S. Hawkes; secretary, J. F. Litooy, Boise, Idaho.

Mississippi Nurserymen's Association—President, J. R. Woodham, Newton; Vice-President, W. A. Woods, Tomnolen; Sec'y-Treas., R. W. Harned, Agr. College.

National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.

National Nurserymen's Association of Ohio—President, W. N. Scarff, New Carlisle, O.; secretary, W. B. Cole, Painesville, O.

Oregon—Washington Association of Nurserymen—President, C. F. Breilhaup, Richland, Wash.; secretary, C. A. Tonneson, Tacoma, Wash.

Pacific Coast Association of Nurserymen—President, Albert Brownell, Portland, Oregon; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Meets annually in June.

Pennsylvania Nurserymen's Association—President, Abner Hoopes, West Chester, Pa. secretary, Henry T. Moon, Morrisville, Pa.

Southern Nurserymen's Association—President, W. A. Easterly, Cleveland, Tenn.; secretary-treasurer, A. I. Smith, Knoxville, Tenn.

Tennessee Nurserymen's Association—President, E. W. Chattin, Winchester, Tenn.; secretary, G. M. Bentley, Knoxville, Tenn.

Texas Nurserymen's Association—President, J. R. Mayhew, Waxahachie, Texas; secretary-treasurer, John S. Kerr, Sherman, Texas.

Western Association of Nurserymen—President, Frank A. Weber, Nursery, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

## PACKING

Packing is a big item with the nurserymen but it has to be done, and should be done well. Nothing is gained by skimping it except perhaps a dissatisfied customer. Take a little more time and select a proper sized packing case, use a liberal amount of moist packing material around the roots. It is customary to charge packing at actual cost. See that your customer gets his money's worth; it will be to the advantage of the stock you are selling him.

A rough, poorly made bale or a box with the contents so loose they will rattle will spoil the appearance of the best stock ever grown. The reverse is also true; indifferent stock properly handled and nicely packed will pass muster, where it would be a sure cause of complaint if put up in poor shape.

Remember, the recipient of your goods is not always a nurseryman but often a person who will judge the value of the goods by the apparent care with which they have been packed.

## NURSERY INSPECTION

Looking at the subject of "Nursery Inspection" in a broad impartial manner, it is undoubtedly desirable and even beneficial to the nursery business, although it may not be very effective in preventing the spread of diseases and pests. It is good discipline; it encourages better care of the nursery cleaner stock and is an all-round good tonic to the business. Like everything else it is the abuse of the idea that is objectionable. The varied laws in the different States governing the same. The licenses, bonds and those restrictive measures that are foolish, unpractical and are really of non-effect as real preventative measures. What is wanted is a uniform inspection law in all States, and the inspectors to be practical, conservative men who not only inspect for specific pests, but would be influential in encouraging the production of high-grade stock. There is little doubt but what in time Government inspection of nurseries will be so organized and systematized that it will be an actual blessing to the nurserymen. It will not only insure clean, healthy stock but a standardization of grades, methods and high business principles. Before this can take place, however, the Departments of Horticulture will have to be of higher standard than they are at present, and be upon a better basis. It should not have to be necessary for the Departments to alarm the country of the threatened invasion of the Gypsy Moth or the White Pine Blister Rust or other dread disease to squeeze an appropriation to carry on their work or to procure sufficient funds to keep the executives in office. The Departments should be so organized that they be entirely independent of political influence and of such a permanent nature that the workers in them can proceed with their life's work independent of outside influence. The one real essential to encourage the coöperation of the nurserymen is to have properly trained, practical men in the Departments, men who will be respected for their knowledge and ability and whose sole interests are the welfare of the horticultural interests of the country.

The nurseryman's lot in April is not a bed of roses, but there is a good time coming for those who attend the convention when all the troubles attendant upon the business of today will be forgotten.

## WHAT VISITING NURSERYMEN MAY SEE IN MONTANA

To nurserymen from the east, south and middle west who attend the Portland meeting and who can devote some time to the pursuit of pleasure or profit before returning to their homes, Montana has much to offer.

Probably no state that plants nursery stock on an extensive scale grows as small a percentage of it as the state of Montana. That this is not due to the want of suitable soil or favorable climate is simply demonstrated by the quality of the stock grown in any of the few nurseries to be found in the state.

Examples of what is being done in the nursery business may be seen at Billings, Helena, Missoula, Hamilton, and other towns in or near which nurseries are located.

In area Montana is greater than all New England with New York, New Jersey, Delaware and Maryland added. It takes a fast railroad train twenty-four hours to cross the state. Montana has 40,000,000 acres of grazing lands, 20,000,000 acres of forest reserve lands, more arable land than Illinois, more coal than Pennsylvania, and grander mountain scenery than Switzerland.

The farms of the state produce all the staple crops grown in the northern half of the United States, and crop statistics bear out the claim of the state to the highest average yield per acre in nearly all of them.

When it is added that the population is less than 400,000, it is hardly necessary to say that a rapid and wonderful development is inevitable and that excellent opportunities abound for business openings and profitable investments.

A few points of interest to visitors may be briefly mentioned. The Yellowstone Valley which leads in the production of alfalfa, sugar beets, and live stock. The Gallatin Valley, sixty miles in length and half as wide, walled in by snow-capped mountains more beautiful than the Swiss Alps. The Bitter Root Valley, a gem of the mountains famous for its orchards and farm products. The Flathead Valley, less developed, but not excelled in fertility or beauty by any of the others.

In northern, eastern and central Montana the newly settled and rapidly developing "Dry Farming" sections would interest some visitors, while Butte, "The greatest mining camp on earth," Helena, the capital city, and Great Falls with its unrivalled water power, would furnish attraction and entertainment to others.

Many visiting nurserymen will be more interested in camping, fishing, and sight-seeing than in industrial developments or business opportunities, and to these Montana can especially appeal. Her rivers, lakes and mountain streams are everywhere stocked with gamey fish, while mountain, forest and valley offer unlimited opportunity for pleasant and healthgiving outdoor recreation.

Montana's greatest attractions for visitors and sightseers remain to be mentioned, viz., the Yellowstone and the Glacier National Parks. The trip to Portland will afford to nurserymen who return through Montana an opportunity to visit one or the other of these great national playgrounds with little or no extra cost for railroad fares.

To many already familiar with the wonders and beauties of the Yellowstone, the Glacier National Park with its 1400 square miles of mountains, glaciers, lakes, rivers and waterfalls will prove unique among the wonderlands and beauty spots of the nation.

The Yellowstone Park may be reached via the Northern Pacific or the C. B. & Q. Railroads, the Glacier Park via the Great Northern Railroad.

Visitors to the national parks should plan their park trips to follow the Portland convention, as the park season opens June 15th, too late to permit a visit before the convention dates.

Billings, Montana.

D. J. TIGHE.

Perhaps in no part of America is more attention paid in the nursery business, to raising ornamentals, than here in Southern California. While deciduous fruiting and ornamental shrubs and trees are grown to some extent, the major part of all nurseries, is evergreen shrubs and trees. The term "evergreen" does not apply here as it usually does in the East, where conifers are generally alluded to, but to many broad and small leaf plants. The past winter has been a severe test on many of them but it has been valuable in showing how much freezing some of our choicest plants will stand. For instance, *Choisya ternata*, *Leptospermum laevigata*, *Laurustinas*, *Veronicas*, *Cistus*, *Gardenias*, *Nandini* some *Cassias* and other fine ornamentals endured a temperature of 18 deg. without injury. In some sections, Citrus stock was badly damaged.

One of the strictly new plants that some of us are boosting, *Feijoa Sellowiana*, a plant of so much merit as an ornamental and fruiting shrub was untouched by the frost, and in the opinion of a great many, is to become one of our great commercial fruits. Our section is finely adapted to rose growing and there are many concerns that grow nothing else.

All of the finest teas and other roses grow to perfection here in the open and many varieties make salable plants in one year from the cutting. Avocado or Alligator Pear, a salad fruit from the tropics, is becoming quite an industry. The unparalleled freeze of this winter has shown that certain varieties are hardier than any of the citrus family. The nursery business in Southern California is fascinating from the fact that every day in the year planting of some nature is carried on.

D. W. COOLIDGE,  
President Coolidge Rare Plant Gardens.

Nurserymen and representatives of nursery houses in Southwest Washington are looking forward with great interest to the joint convention of the Pacific Coast and the American Association of Nurserymen to be held in Portland, June 17th to 20th, and the delegates to the Portland Convention from this section of Washington will see that nothing is overlooked for the convenience and entertainment of the hundreds who will come to the Rose City for the Convention.

Members of the Association who live in the East and will brave the wilds west of the Mississippi River for the first time when they buy their tickets and ask for the usual convention rates, have a splendid surprise in store for them, one they will



long remember and cherish, for it should prove the finishing touches to their education.

Eastern nurserymen who make the trip for the first time will in all probability be overcome, wonderstruck, with the immensity of the Great Northwest and some of the hardships that are being overcome in the reclamation of lands in parts of Idaho, Oregon and Washington. On his trip across the continent he will see first where the fights are now being waged, but as the train gets closer to Portland, it will wind in and through fertile valleys where the visitor will at first be of the opinion that the orchards were prepared for his coming, but as other valleys are penetrated and there will be found an exacting sameness in the care of the ground and the trees, the truth will finally dawn on the visitor that he at last is in the midst of the Great Northwest—the home of the big red apple and then he will realize perhaps for the first time why Northwest Apple growers receive more for a single box of apples than can be realized by many Eastern growers for a barrel of the forbidden fruit. He will see that the apple grower of the Northwest alone is responsible for the reputation and faultlessness of his fruit and that the grower is not receiving more for his fruit than is deserved—but rather is receiving a return for his apples which he, the grower, makes possible by hard work and scientific knowledge.

One hears more of apples in connection with the Northwest than perhaps any other fruit, but these conditions are fast changing. The time is not far distant when Olympia, the capital of Washington and the district tributary to it will be known from Coast to Coast as a small fruits country, to say nothing of pears, for which this district is especially well adapted.

The Easterner, if on his return trip stops off at Olympia or any of the cities tributary to it, will learn that when the growers of berries found that no matter how fast an express was put on between the Coast and St. Paul that berries would not withstand the 99 hour journey, they did not give us growing berries or agree to let the East want for the variety of berries which can only be raised in the Northwest, but through the citizens of Olympia induced the National Canning Company to erect its plant here and now the fruits of the soil are shipped East from this section of the Northwest on very much the same principle that Grand Opera Music is recorded on disks in New York and sent West.

Grand Opera is demanded by Westerners, but Grand Opera cannot afford to come so far west and so the voice is canned and sent. In the other instance Northwest fruit is

demanded by the Easterner, but the journey over the steel rail which binds this continent fast is too long a one and so the perishable Northwest fruits, every bit as rare to the Easterner as Grand Opera is to the Westerner, is canned and shipped East.

Of late the huckleberry industry has grown to enormous proportions in this section of Southwest Washington. Until the coming of the cannery this fruit was allowed to grow wild and then perish on the bushes, but last year the National Canning Company of Olympia paid more than \$20,000 for wild huckleberries and for the first time in the history of the State this fruit is now being cultivated and encouraged.

Hundreds of acres of Loganberries are also being set out and at the present time it is impossible to get plants.

Of late years the grape industry has grown to enormous proportions on the Islands and main-land between Olympia and Tacoma, the soil being especially adapted for the growing of many of the most high priced varieties.

The visiting delegate perchance will also learn that last year the State of Washington imported over \$7,000,000 worth of dairy products despite the fact that the dairy business in Washington has increased more than 25 per cent within the last two years.

Then the visitors will realize that what first appeared to be a stage with the settings thereon especially for this advent, is nothing more than a vast field of opportunity, which though producing millions of dollars of wealth annually has not yet hardly been scratched, and this will be the message he will carry home from the land of the big red apple.

Detroit, Wash. A. ECKERT.

BUDDING LILACS

A correspondent would like to hear from any nurseryman who has had experience in budding Lilacs on the Amoor River Privet and what success was had, also what Privet stock can be used which is better than California Privet. Any readers being experienced along this line will confer a favor by addressing the Editor of the NATIONAL NURSERYMAN.

AGAWAM, Mass., March 13, 1913.

NATIONAL NURSERYMAN PUB. CO.,  
Rochester, N. Y.

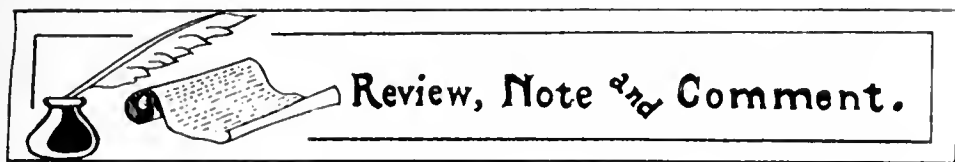
Dear Sirs:

Inclosed please find \$1.00 to renew my subscription to the NATIONAL NURSERYMAN. I certainly think that I get full value for my subscription price.

Yours truly,  
C. W. ATWATER.

“THE MONTHLY SUMMARY OF COMMERCE AND FINANCE” FOR JANUARY, 1913, GIVES THE FOLLOWING REPORT OF IMPORTS OF PLANTS, TREES, SHRUBS AND VINES.

ARTICLES	JANUARY—				SEVEN MONTHS ENDING JANUARY—					
	1912		1913		1911		1912		1913	
	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values
Plants, trees, shrubs and vines:										
Fruit plants, tropical and semi-tropical, for propagating purposes <sup>2</sup> . . . . .		4,854		1,217				16,795		1,612
Bulbs, bulbous roots, or corms, cultivated for their flowers or foliage . . . . .	8,834	55,738	2,696	29,821		1,485,667	207,994	1,663,080	282,976	1,776,898
All other . . . . .		94,366		126,043		495,153		631,043		713,734
Total . . . . .		154,958		157,081		1,980,820		2,310,918		2,492,244



"Make-Good" catalogues is the title of a book from the J. Horace McFarland Organizations, Harrisburg, Pa. Most nurserymen have seen the work of this company at some time or other and few there are but what would admit that it ranks high. In fact, nursery advertising men claim they can recognize this company's work without their signature. If any criticism can be given, it is because it is of such a high standard as to become monotonous. The book before us shows color work in a Muskmelon that is satisfying in every way except the taste, and from the looks of things this can be taken for granted. The color work in the Japanese and American Iris are so true that it seems a shame to put so much labor upon books that are merely used for six months or a year and then thrown away.

We have before us a catalogue issued by B. K. Bliss & Sons, 20 Murray Street, New York, N. Y., in 1872, and for comparison sake some of the colored plates of that day were compared with the McFarland's work. The comparison shows the remarkable strides that have been made in this art, and much of it is undoubtedly due to such as the McFarland Organizations, Harrisburg, Pa.

Congressional distribution of seeds was ended by the Senate, February 27th by eliminating from the Agricultural appropriation bill the provision appropriating \$256,100.00 for that purpose.

General catalogue of The Storrs & Harrison Company, Spring 1913 is before us. On the cover it features *Gladiolus* America in colors, and *Anemone* Queen Charlotte. This firm is one of the very few concerns that carry a complete line of what one may designate "Everything for the Garden and Grounds." While perhaps they are more extensively known as nurserymen, as indicated by their catalogue they must do a large business in vegetable and flower seeds, exotic and greenhouse plants, bulbs, hardy perennials. In fact they are nurserymen, seedsmen and florists. They have 1,200 acres under cultivation, 45 large greenhouses, storage cellars and packing houses covering over an acre, and a record of fifty-nine years of steady growth shows a business built on good foundations.

We have before us a copy of the State Crop Pest law as passed by the legislature of West Virginia, February 21st, 1913, to take effect from its passage, approved by the Governor, February 26th, 1913. The new bill as passed by the legislature is practically the same as previously. The changes are very minor. A copy of the new law may be obtained upon application to W. E. Rumsey, Morgantown, West Virginia.

One of the most attractive catalogues that have come before us this spring, is that of the Palisades Nurseries. It is most unusual in size for a catalogue, being more like a maga-

zine, but this perhaps adds to its distinguished appearance. It is principally Herbaceous Perennials, although apparently listing Shrubs, Roses, Evergreens, Trees, etc., at the end. It is copiously illustrated and well arranged and carries a very complete collection.

### COST OF PRODUCTION

The following report was received from the Purdue University Agricultural Experiment Station. Fair estimates show that it will cost in the neighborhood of \$5.50 per acre to grow a crop of oats, not counting anything for land rental. In fact, the statistics gathered in 1905 from farmers over the State give the average cost of producing an acre of oats as \$5.53. If we add to this sum \$5.00 for rent of land, the production cost amounts to \$10.53 per acre. We readily see that the returns are entirely used up in paying for raising the average crop. Some are certainly making a profit, while many more are as certainly losing money when they raise this crop under present conditions. Evidently nursery stock is not the only kind of which the cost of production is not known, and very often sold below cost. It would seem as if the cost of such a crop as oats could very readily be determined, and there would be little excuse for the farmer losing money on this crop after he once knew what his cost of production was.

### CIRCASSIAN WALNUT FOR FORESTRY PURPOSES

The United States, says the Department of Agriculture, is probably the largest consumer of Circassian walnut, one of the world's best known and most expensive cabinet woods.

The high cost of Circassian walnut is due to the scarcity of the beautifully figured variety demanded for furniture and interior finish, for the tree itself is more widely distributed than almost any other of commercial importance. The demand for the best wood, however, has always outrun the supply. Even in the eighteenth century, when wars in Europe were frequent, so much Circassian walnut was used for gunstocks that the supply was seriously depleted. Early in the nineteenth century the wood of 12,000 trees was used for this purpose alone. Single trees, containing choice burls or fine bird's-eye figures have sold for more than \$3,000.

The tree is native to the eastern slopes of the Caucasus and ranges eastward to the foothills of the Himalaya Mountains, from which it extends southward to northern India and the mountains of upper Burma. It has been widely planted in Europe and the United States, in this country under the name of English walnut. The wood grown here, however, has not the qualities demanded by the cabinet and furniture maker. Much of the Circassian walnut now used comes from the Black Sea and from other parts of Asia.

According to a circular just issued by the Forest Service the demand for Circassian walnut has resulted in the substitution of other woods. Our own red gum is often sold as Circassian walnut, and butternut is also similar in general appearance to the less highly figured grades. Many good African, Asian, and South American woods resemble Circassian walnut, though none possesses the magnificent figure, delicate tones, and velvety texture of the latter. The circular discusses the supply and uses of Circassian walnut, and those who wish to know how possible substitutes may be distinguished can learn from this circular the distinctive marks which the Government's experts have discovered.



## Fruit and Plant Notes.

### EVERBEARING RASPBERRIES

Two crops of everbearing Raspberries are along the line of improvement in these fruits, and as time goes on there is little doubt but what future new varieties must have this quality to qualify.

The St. Regis Raspberry first offered by J. T. Lovett, Little Silver, N. J., is now widely disseminated according to the various catalogues that come to the office of the NATIONAL NURSERYMAN and has evidently won a place for itself among the good standard varieties.

This year we notice The Elizabeth Nursery Company, Elizabeth, N. J., is offering another new everbearing Raspberry under the name of "Ranere." This berry (a chance seedling) had its origin on the farm of a thrifty Italian farmer in Atlantic County, New Jersey, who kept it to himself for a number of years but eventually let his neighbors have a few plants. It was brought to the notice of the trade by J. Murray Bassett, Hammonton, N. J.

Mr. Runyan of the Elizabeth Nursery Co., who inspected the fields before exploiting it was much impressed with it as a good grower and profitable variety. Fruit has been gathered from June until November. Less than a two acre plot netting 400 for the June crop the second year of bearing, and a heavy crop during September and October which sold at good prices, but no record being recorded.

It is described as a crimson berry without a purple shade, large size, good flavor, firm and consequently a good shipper.

The William P. Stark Nurseries, Stark City, Missouri, are certainly advertising their "J. H. Hale" peach, and there is little doubt that it is a peach of very high quality, as the Stark people know what good fruit is.

F. Ferguson & Son, Hurtsville and Camden, N.S.W., writes the NATIONAL NURSERYMAN as follows:

"We shall be glad to open up negotiations with some of your fruit tree specialists for the purpose of trying some of the Australian fruits. We have some very good things here. Australian raised apples, peaches, pears, etc., that should be taken up on your side."

According to their catalogue received at the office of the NATIONAL NURSERYMAN, they list a great number of varieties of apples, among them quite a number of the varieties that are well-known on this side, such as Red Astrachan, Duchess of Oldenburgh, Gravenstein, Esopus, Spitzenberg, Ben Davis, etc., beside a number of the old English varieties. It would seem as if American varieties being a success in Australia that the reverse would also be true, and that varieties originating in Australia might be extremely valuable to this part of the country. At any rate it would be worth the experiment of some enterprising nurseryman.

It is remarkable what strides have been made in the Hortensia Group of Hydrangeas. While perhaps this group

is handled more by the florists than the nurserymen it is a great favorite for planting out of doors in some localities. It is most at home along the seashore and may be seen in all its beauty from Newport to Cape May at the various summer resorts. The colors are mainly blue, pink and white. Farther inland and north of Washington it does not seem to stand the winter, as the tops invariably get winter cold which prevents it flowering. As a florists' plant it is used very extensively for forcing for Easter and for growing as large specimens in tubs. The writer saw a splendid lot of new varieties at the International Show in London last June, and judging from some of the American Florists' lists they were not slow to take hold of them, as they are already being offered in America, and we may expect to see them distributed freely on this side. The color of the Hydrangea Hortensia Otaksa seems to be an uncertain quantity, as very often the pink will come blue and the blue pink according to the soil or position in which they are grown, so that if some of these new varieties are purchased on the strength of their color, disappointment is to be expected, but apart from the color, the size, form of bract and general habit of the plants were very distinct and showed considerable improvement.

Edward F. Dwyer & Sons, Lynn, Mass., are offering a new Clematis "Ina Dwyer." It is a seedling of their own, flowers measuring fully two inches across and on long stems well above the foliage, having as many as 25 to 50 sweet-scented flowers to a stem. The blossoms are white shaded to blue on the edges and tips of petals. Its period of blooming is during August, lasting all through that month. It is claimed to be a strong grower and equal to covering a trellis nine feet high and ten feet long in one year. The Massachusetts Horticultural Society has awarded it a first-class certificate by unanimous vote of its committee.

### THE SUBJECT OF REPLACEMENT

This subject invariably comes up at conventions, nurserymen's meetings and wherever occasion gives the nurserymen an opportunity to express his opinion upon it. There is little doubt but that the nurseryman is to blame for the condition of things, but like any other evils, it is a growth that flourishes unnoticed until it gets to that stage where it is very difficult to eradicate. Few nurserymen approve of it. A great many practice it in some form or other, but scarcely any but what would be glad to be entirely rid of the practice. The following letter is a fair sample of the many received by nurserymen, and indicates the attitude or expectation of lay mind when the stock he has purchased from a nurseryman does not turn out satisfactory.

Gentlemen:

Some months past I ordered and received from you the following: Twelve shade trees, six evergreens, fifty feet of privet and a number of shrubs.

The above mentioned stock was planted under the most favorable weather conditions by an experienced gardener, the soil having previously been well cultivated. This stock has since been watered regularly and every attention given it in order to bring out the best results. Hence, I am at a loss



to understand why twenty-five feet of the privet has withered, four shade trees have died entirely, not to mention the poor showing made by several of the evergreens and shrubs.

Inasmuch as the stock was properly planted by an experienced man I feel that you should make good my loss, by replacing the aforementioned failures.

I do not presume to know the specific reason for the failure of these trees and shrubs to properly mature. However, some of them are in excellent form and growing splendidly. Therefore, the loss of the remainder, must either have been due to a poor selection or carelessness in packing. Trusting that you will readily see the logic in my claim and awaiting an early response I beg to remain.

Yours very truly,

A wholesale nurseryman is not much concerned in the matter, so that it falls heaviest upon the retailer who comes in direct contact with the consumer, and it is to be hoped that the matter will have consideration at the coming convention, and at least formulate a policy that will be adhered to by the trade at large.

### PROTECTION FROM WINDS

J. W. Maher, Devil's Lake, N. Y., in the *Minnesota Horticulturist* gives a very interesting paper on the subjects of Protection from Winds. Eastern Nurserymen would likely pass the subject by as one of more vital interest to the West, crops not being so likely to suffer in the lumber belt as in the treeless plains of the West. Yet the Dutchmen in their country where it looks to the visitor as if there was never enough wind to make their windmills go round, shelter all their plantings by hedges and rows of trees and we admire the quality of the nursery stock they grow. In England an extremely moist country where plants would hardly seem likely to suffer from dry winds, shelter is one of the first considerations of all plantings either to make it or give it.

Nurserymen often claim their stock is grown on bleak and exposed hillsides and supposedly hardier on that account; without questioning this claim which is open to doubt, there is no doubt better and more profitable stock can be grown in positions sheltered from the drying winds. Mr. Maher blames the wind for

**DISTRIBUTION OF WEED SEED.**—Nature intended to take advantage of the winds to aid in the distribution of seeds, and for this reason equipped seeds with wings and other appendages to facilitate such distribution. Nature has also taken great precaution in the matter of producing enormous quantities of seeds. The number of seeds produced by some of our weeds is so great as to be almost beyond belief. Seeds are carried by wind, by water, by birds and beasts and men and by every other conceivable means. But the winds and the floods following our torrential rains are their special means of distribution on the plains.

It matters not how clean of weeds your fields may be if the winter winds bring you wild oats and all the other common field weed seed gliding over the snow, and the summer winds bring you Canada thistle, the various milkweeds and the many other winged seeds and deposit them in your clean fields.

A ten to twenty row closely planted shelter belt will arrest all of those moving seeds and make fertilizer of them. Its shade is too dense to permit of their growing.

Jack pine is found growing in the sand dunes at the south end of Lake Michigan. This is two to three hundred miles south of its natural habitat. The seed was undoubtedly blown over ice and snow the length of the lake.

I repeat, make observations and measurements and determine the exact distance our windbreaks are effective and carefully note the destructive effect of winds and the amount of damage caused by them.

**DRIFTING OF SOIL** caused by high winds is another source of great damage. Our one crop system of farming is burning the humus out of the soil, and it is disintegrating and reaching that state where it drifts easily and washes easily. The winds and waters help us greatly in extracting the fertility out of the soil. The humus and other most fertile elements are blown away and washed away.

The same system of farming and neglect to protect the soil against drifting with the wind and washing away by water has rendered the New England states and great portions of the East and South barren. It behoves us to take inventory and see "Whither we are drifting."

**EVAPORATION.**—Scientists estimate that one thousand parts of water are required to produce one part of dry matter. Plants drink their food in dilute solutions. It is important that we do everything possible to conserve the water in the soil for plant growth.

The greater the velocity of the wind, the greater the evaporation. We must arrest the strong winds and reduce their high temperatures. That is what trees do. We may get light and assistance from the older countries. Germany has forty-five per cent of her total land area under the plow, and twenty-seven per cent of it under forestry. There is no censorship as to farm crops, but no one can cut down a tree unless he plants one to take its place. Germany supports sixty million people on an area smaller in size and less fertile than the two Dakotas and Montana. In the Po Valley, in Northern Italy, every field is surrounded by a row of trees. The fields will not average to exceed ten acres each. Land is worth from \$200 per acre up. None of the fields are being enlarged, on the contrary the larger ones are being subdivided by rows of trees.

When you bring in your reports there will be many indictments against the winds.

### SUIT AGAINST STARK NURSERY AND ORCHARD COMPANY

"Recently W. P. Stark of Neosho, Mo., filed suit against Stark Bros.' Nursery and Orchard Company of Louisiana, Mo. The papers contain many allegations which the parent company state are misleading and untrue.

As the NATIONAL NURSERYMAN is not the proper place to air or discuss such matters, we prefer not to publish particulars, in deference to both parties for each of whom we have the greatest respect."

TOPEKA, Kansas, February 18, 1913.

NATIONAL NURSERYMAN PUB. CO.,

Kindly renew our subscription for the NATIONAL NURSERYMAN. We cannot afford to do without it.

Yours truly,

L. R. TAYLOR & SONS.



## Business Movements.

### NICHOLS & LORTON NURSERY LEASED

Buying the stock and leasing the fine acreage long famous as the Nichols & Lorton nursery, two new men have come to Davenport to operate the Davenport Nursery, which was operated so successfully, by Nichols & Lorton for 40 years. Messrs. Mast and Duppert, the gentlemen who have come here, are graduates of two of the best forestry courses in the country, and come here after a varied and interesting experience in the forestry service.

Wm. H. Mast graduated from Ames agricultural college in 1900, and took the full course in forestry at Yale. He has been connected with the United States Forestry service for 13 years, has been supervisor of the Nebraska national forest and conducted an extensive nursery and planting work for the government for seven years. For the last two years he has been in Colorado.

W. J. Duppert was graduated from the forestry course at Ann Arbor, Mich., and has also been connected with the forestry service. For the last two years has been adjunct professor of forestry at Nebraska university at Lincoln, Neb. He is a professional landscape gardener. He was reared on a farm in northern New York, while Mr. Mast was reared on a farm near Ottumwa, Ia. Sam Lorton says they are safe to make a grand success of the business.

### MENERAY NURSERY ORDERED SOLD

The nursery owned by F. W. Meneray, Council Bluffs, Ia., and which has been in the hands of a receiver for several months, has been ordered sold to satisfy a judgment of nearly \$60,000 against the company in favor of the First National Bank of that city. The judgment is based on promissory notes given by the nursery company for loans made by the bank from December 27, 1911, to August 15, 1912. The stock and real estate will be sold as a unit. The property includes 46 city lots on which the offices and a part of the nursery are located, nearly 50 acres of growing stock and 500,000 apple grafts being grown on contract by a Missouri firm.—*American Florist*.

### E. S. WELCH WINS SUIT

After being out over three hours the jury in the case of E. S. Welch of Shenandoah, Ia., against B. E. Fields & Son to recover payment on a shipment of nursery stock returned a verdict in favor of the plaintiff.

Mr. Welch was suing for the balance due, amounting to \$316.80, on a shipment of trees made in November, 1911. The defendant claimed that the trees failed to grow the following spring and that they were dead when shipped.

The plaintiff produced evidence to show that on the date the trees were unloaded the thermometer registered 20 degrees above zero and it was claimed that the trees died as a result of being exposed to the freezing temperature. Nurserymen from over the state testified as to the condition of nursery

stock that has been affected by cold. The weather records from the Lincoln government bureau figured in the evidence.

All of Saturday forenoon was given to taking testimony, about twenty witnesses in all being examined.

The case went to the jury about 2:15 Saturday afternoon and a verdict in favor of the plaintiff was returned at 5:30. The defendants will appeal the case to a higher court.

The jury was composed of George B. Eddy, John D. Markey, Henry Carroll and J. H. Scott.

[Extract of Clipping from Buffalo paper sent by W. J. Palmer & Son, Buffalo, New York.]

### PALMER WINS AGAIN

#### Buffalo Florist Awarded of Plants Destroyed by the State. A Gipsy Moth Case

Justice Pound Holds That Destruction Without Appraisal was Unwarranted by Facts.

In the case of William J. H. Palmer, Florist, against the state department of agriculture to recover the value of 2,260 Azaleas and Rhododendrons destroyed by order of Calvin J. Huson, commissioner of agriculture, because Gipsy moth egg masses were found on two of the plants, Justice Pound this morning handed down his decision directing that an appraisal be had of the value of the plants destroyed and that Mr. Palmer be paid for the same.

Some time ago the case was tried before Justice Mareus and a jury on the issue raised and the court directed the jury to find a verdict that Mr. Palmer was entitled to the peremptory writ of mandamus. The matter then came before Justice Pound on an application for the appraisal. In his decision he says:

"The commissioner had no facts before him upon which he could decide that every plant was infected with gipsy moth. He could, on the facts, only decide that there was reasonable ground to believe that they were so infected. Destruction without compensation is the rule where the facts may be shown with certainty. In other cases an appraisal should be had. So ordered."

Sometime prior to October 16th, 1911, Mr. Palmer had received a shipment of Azaleas and Rhododendrons from Belgium and they were at his greenhouses in Lancaster. On October 16th, two inspectors from the state department of agriculture visited the greenhouses and found an egg-mass of the gipsy moth on one plant and evidence that another plant had been similarly infected. They telegraphed to the department asking for instructions and some days later got telegraphic instructions to destroy the whole shipment.

Notice was served on Mr. Palmer and the inspectors then went to Lancaster and carried out their instructions from the department, destroying all the plants and the containers that came with the shipment. Mr. Palmer then demanded an appraisal, which was refused.

Under the statute the matter had to take the peculiar course it took, going first into trial term and then into special term.

Rebadow & Ladd represented Mr. Palmer and Henry W. Killeen the State Department of Agriculture.



From the U.S.D. of A.

## NEW BULLETINS OF INTEREST TO NURSERYMEN

Technical Papers on Miscellaneous Forest Insects. VI. Chalcidids Injurious to Forest-Tree Seeds. By S. A. Rohwer, Entomological Assistant. Pp. 157-163. (Technical Series, No. 20, Part 6, Bureau of Entomology.) Price, 5 cents.

The Dispersion of the Gipsy Moth. By A. F. Burgess, Expert in Charge of Biological Investigations. Pp. 62, pls. 16, figs. 6, map. (Bulletin 119, Bureau of Entomology.) Price, 20 cents.

The Persian Walnut Industry of the United States. By E. R. Lake, Assistant Pomologist, Pomological Collections. Pp. 112, pls. 11, figs. 24. (Bulletin 254, Bureau of Plant Industry.) Price 20 cents.

OFFICE OF THE SECRETARY,  
WASHINGTON, D. C.

March 10, 1913.

The Department of Agriculture has been figuring up the losses by fires on the National Forests for the calendar year 1912, and finds that they were the lowest of recent years. Less than one acre to every thousand of timbered lands was burned over, and the total damage is estimated at \$75,290, or less than one dollar to every 2,000 acres of area.

The good record is attributed to, first, favorable weather conditions in most localities, and second, the increased efficiency or the fire-fighting organization. As Congress makes available the means for extending the system of communications on the National Forests, the equipment of trails, roads, telephones, and lookout stations is yearly enlarged and the fires, it is said, are discovered more quickly and fought more rapidly.

An especially good showing was made by the Forest officers last year in extinguishing fires outside the National Forests before they reached the Forest boundaries. Such fires constituted more than one-sixth of all fought by the Forest rangers and guards. About nine-tenths were extinguished before they touched the Forests. Of the fires within the Forest boundaries more than 18 per cent were on lands in private ownership. Nearly one-fourth of the extra expenditures due to fighting fires—that is, expenditures outside the time of the regular Forest force—was incurred in fighting these fires.

Lightning caused more fires than any other agency, followed by railroads, campers, and incendiaries, in the order given. The greatest losses occurred in Arizona, Arkansas, and California, in which States there was also the largest proportion of fires caused by lightning and by incendiarism. About 27 per cent of all the fires were started by lightning, and about 38 per cent were due to carelessness. The proportion in each case was practically the same as in the previous year.

The total number of fires was 2,472, as compared with 3,369 in 1911. They burned over, in the aggregate, 230,000 acres as against 780,000 in 1911. California led all States in total number of fires, and in the number caused by lightning. Arizona stood second in both of these classifications. Arkansas stood fourth in total number of fires, and first in those of incendiary origin, with California second. The one National Forest in Kansas had only one fire, which burned over less than ten acres and cost \$1.11 to extinguish. North Dakota had no fires on its one small Forest.

Of the 2,472 fires, over 75 per cent were put out before 10 acres were burned over, and nearly 50 per cent before one-quarter of an acre was covered. Only 12 fires caused damage of more than \$1,000 each.

## BROWN TAIL MOTH

The winter form of this insect is very different from the gipsy. Eggs numbering 200 to 400 are laid in clusters on the under side of leaves on the upper and outer branches of apple, pear, maple and elm trees. The caterpillars appear the latter part of August or early in September. After feeding a short time they spin a web or nest among the leaves about the size of a hen's egg, larger or smaller. In this form several hundred caterpillars one-fourth to one-half of an inch long pass the winter ready to feed when spring comes. They become full grown and feed late in June when they form a cocoon within a few leaves. The adult moths appear in July and fly long distances thus being difficult to control. They spread broadcast with the wind and are attracted at night by light. In this adult stage, they do no damage and soon die. The hairs of this insect are poisonous.

If webbed nests with small caterpillars therein are found, specimens should be carefully wrapped and sent to the Department of Agriculture, Albany, N. Y., for identification and full particulars should be given.

## CHECKING TREE-BEETLE RAVAGES

Investigations conducted by the government in 1907 and 1910 to determine the conditions on an area of more than 1,000,000 acres in northeastern Oregon showed that the killing of a large number of trees by the mountain pine beetle had been going on in this area since 1905. In order to demonstrate the practicability of the control measures recommended by the expert on forest insects of the bureau of entomology, an area of about 90,000 acres, principally in the yellow pine, was selected in which to conduct a beetle control project. This area was located south and southeast of the advance movement of the swarms of depredating beetles in order to check it. In the spring and summer of 1912 a thorough inspection was made of the treated area. A similar untreated or check area in another forest was also examined. It was found that on the 87,950 acres of the treated area the number of trees killed by the insects had decreased from 37,178 trees to 4,698—a reduction of 32,480 trees—or more than 80 per cent, while on the untreated check area in the other forest there was no decrease and in one small isolated area the increase in the number of trees killed was 240 per cent, demonstrating the practicability of the control project.—American Florist.



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Rhododendrons, Clematis, H. P. Roses, Hardy Azaleas, Paeonies Magnolias, Box Trees, Fancy Conifers, Hydrangeas and Shrubs, our specialties at our **HOLLAND NURSERIES**. Some of the goods on hand here during the packing season.

**EXTENSIVE STOCK** of Hardy Rhododendrons, Azaleas, Andromedas, Kalmias, Ericas, Ornamental Evergreens, Flowering Trees, Forest Trees, etc. The stock is extremely hardy being grown on high and exposed situations, and of first rate quality, prices low. Write for Catalogue containing large variety of general Nursery Stock. Excellent shipping facilities from Liverpool. **JAMES SMITH**, Scotland Nurseries, Tansley, Matlock, England. Cable address, "Scotland, Tansley."

### RELIANCE INSECTICIDE

Instantly destroys all forms of plant lice, Green and White Fly, Thrips, Mealy Bug, Red Spider, Brown and White Scale and all other soft-bodied insects. Does not injure foliage or bloom and is used as a spray in greenhouse or garden. **Guaranteed**. One gallon makes 30 to 50 gallons spray. Per gallon, \$1.50; ½ gallon, \$1.00; quart, 75c. Trial size (make one gallon spray), postpaid, 50c.

**RELIANCE MFG. CO. = Orange, Tex.**

## TREE SEEDS

Large assortment of Tree, Shrub and Fruit Seeds for ornamental and forestry purposes. Send for catalogue.

**CONYERS B. FLEU, Jr.**  
GERMANTOWN, PHILA., PA.

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**ROSES AND FRUIT TREES NURSERIES.** The best and cheapest address for all sorts of Rose Stocks, Fruit Trees, Gooseberries and Currant Shrubs.

**DELIVERY AND PAYMENT** according to usual commercial conditions.

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clean, freshly  
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Cash with order. Prompt shipments

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**FOR SALE** Mich. Nursery Farm and several coming crops of trees, gooseberries, etc.

40-yrs. good will free. \$8,000 to \$12,000 annual trade, mostly in West Michigan; good 80-acre farm adjoining corporation limits, 3 houses, 100-ft. packing shed, large barns, buildings costing over \$6,000, and all going at \$8,000. Terms, good reasons for selling.

Lock Box 3. **Bloomington, VanBuren Co., Mich.**

## HELP WANTED

Landscape Foreman, for arranging and planting nursery stock. Tree Moving Foreman, familiar with the moving of large trees. Nursery Foreman, to care for a general line of ornamentals.

State which position you apply for, and give your experience and wages wanted in the first letter. Steady position.

Apply immediately.

### LEWIS & VALENTINE CO.

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**NURSERY AGENCY** salesman or correspondent wants position at straight salary or some equitable participation in the business. Have installed new agencies. Know profit making system from A to Z. Practical nurseryman. Experienced correspondent. Know large number of nursery agents. Bookkeeper, stenographer, all around office man. Own typewriter. Temperate, dependable, energetic, adaptable. Address, "Good References," **NATIONAL NURSERYMAN**, Rochester, N. Y.

## STANDARD AGRICULTURAL BOOKS

**THE GOLD MINE IN THE FRONT YARD**, by C. S. Harrison. A book about flowers, both for ornamentation and commercial culture, written with special reference to Northwestern conditions. Illustrated. 280 pp., Price, 12 mo. cloth, \$1.00.

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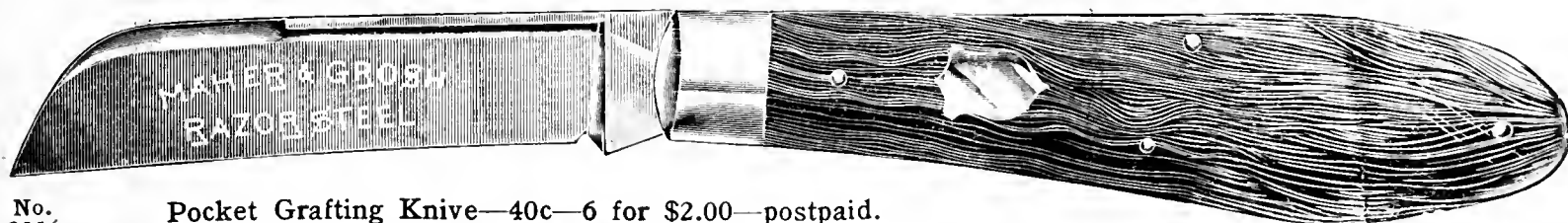
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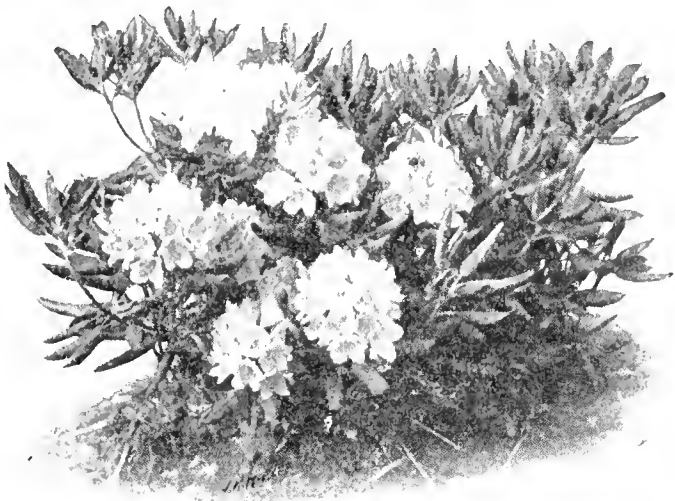
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O. M. Free .....	195	265	165	115
Ringgold Cling .....	65	325	765	925
Salway .....	2512	541		883
Sneed .....	1254	562	862	685
Smock .....	365	222	245	345
Stump .....	131	245	423	612
Triumph .....	1845	985	685	582
Thurber .....	255	184	223	224
Wheatland .....	655	625	925	1125
Wonderful .....	312	282	315	412

The above peaches are clean, smooth, high grade.  
Write for Prices.

THE  
ABOVE  
PEACH  
ARE  
CLEAN,  
SMOOTH  
AND  
HIGH-  
GRADE  
  
WRITE  
FOR  
PRICES

## New Haven Nurseries NEW HAVEN, MO.

## Xenia Star Nurseries XENIA, OHIO

*General Assortment Nursery Stock*

**Apple, Cherry and Peach**

IN CARLOAD LOTS

WRITE FOR PRICES

## The Horticultural Company Worcester, Mass.

SOLE AGENTS FOR

## Alma Nurseries

Oudenbosch, Holland

Evergreens, well grown, sheared  
and finished stocks.

Deciduous Ornamental Trees and  
Shrubs.

Rhododendrons, Azaleas, Mag-  
nolias, Clematis, Roses.

## Focko Bohlen

Halstenbek, Germany

Forest, Fruit and Ornamental Tree  
seedlings and transplanted stocks  
of superior quality. PRICES  
RIGHT.

Tea, Hybrid Tea and Hybrid  
Perpetual Roses budded very  
low on Canina.

## Holland Nurseries

Aalsmeer, Holland

Boxwoods and Taxus of the finest  
form and finish.

Rhododendrons, Azaleas, Laurels,  
Almonds, Crab Apple, Wista-  
rias, and other beautiful things,  
specially grown for a critical  
Florist Forcing Trade.

PRE-EMINENTLY THEIR SPECIALTY.

REPRESENTING:

## Georges Benard

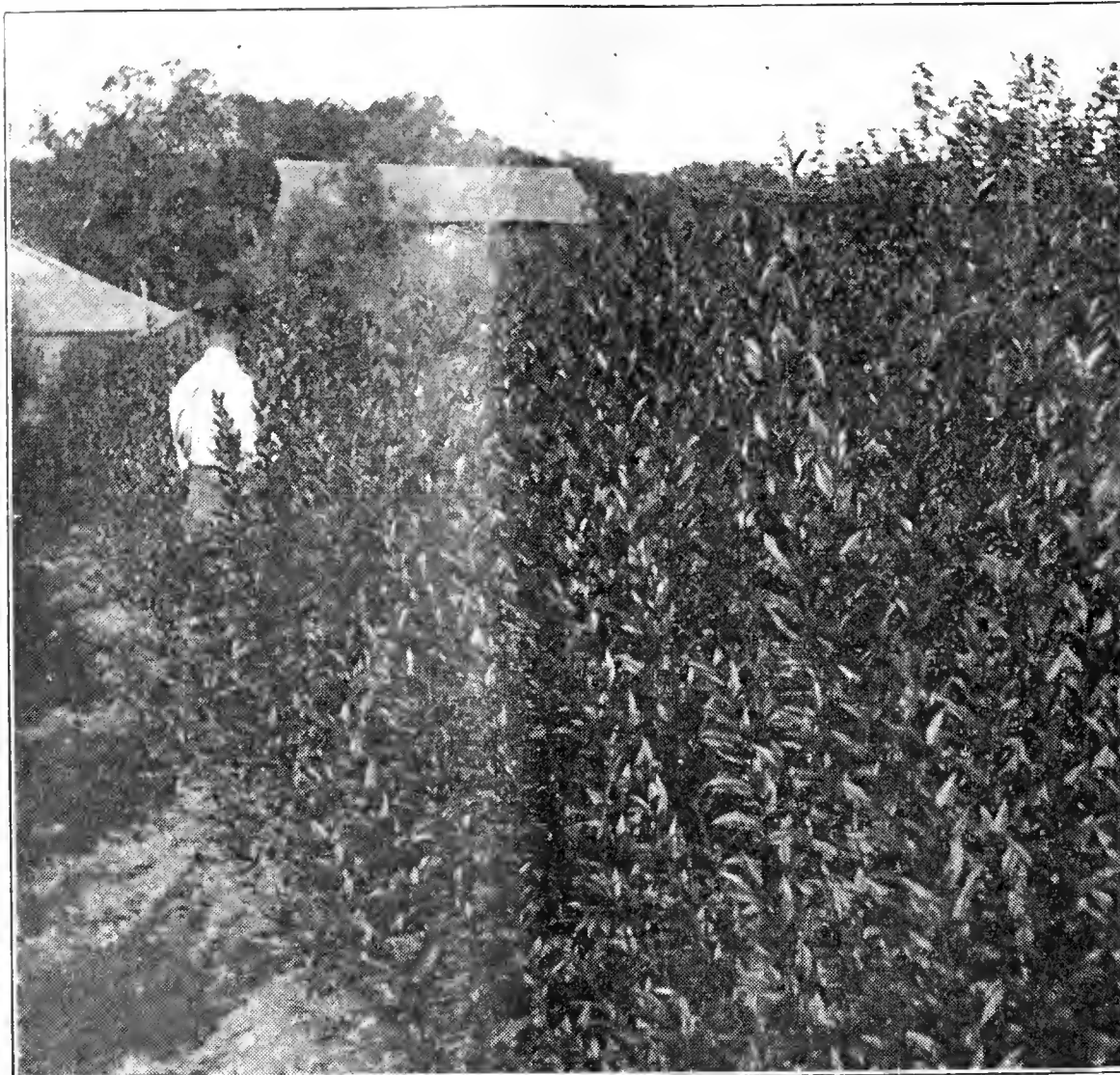
Olivet, Orleans, France

Fruit and Ornamental Trees and  
Shrubs, Coniferous and Broad-  
leaved Evergreen Stocks.

Seedlings, Transplants, Grafts or  
Cuttings.

**POINTS OF MERIT  
POSSESSED BY NO  
OTHER VARIETY  
BEFORE INTRO-  
DUCED**

Extreme hardiness  
Vigorous and dense  
growth.  
Dark green, glossy  
foliage.  
Holds rich color to end  
of season.



**POINTS OF MERIT  
POSSESSED BY NO  
OTHER VARIETY  
BEFORE INTRO-  
DUCED**

Ideal for Topiary de-  
signs.  
Nearly evergreen.  
Tested for hardiness  
in Illinois, Iowa and  
Nebraska.  
Easily propagated and  
superior to the Cali-  
fornia Privet in every  
particular.

POLISH PRIVET, a new hardy variety for the North. Photo of 3-yr. planting cut back last spring to near the ground.

**A new and distinct variety of Hardy Privet introduced by Irvin Ingels of the HOME NURSERY, LaFayette, Illinois. Tested for hardiness in northern Illinois, Iowa and Nebraska.**

**HISTORY**

This Privet along with a large number of various kinds of Shrubs, Trees, Fruits and Plants was imported from Poland, Russia, over twenty years ago by the Iowa State Agricultural College at Ames, Iowa, in the hopes of getting stock that would withstand the severe weather conditions of the West.

These various plants and trees were planted in the Experimental Grounds of the College for observation and test to their adaptability to the rigorous climate on the treeless plains of the West.

On visiting the grounds a number of years ago our attention was called to this Privet by Prof. A. T. Erwin, head of the Horticultural Department of the College, as being absolutely hardy in that locality and a variety that should be introduced to the Public, being of vigorous growth, its glossy foliage a dark rich green and altogether a desirable ornamental Shrub, suggesting to us that if we wished to introduce it they would give us some plants which they did the following spring.

After having it growing on our grounds for a number of years and comparing it with other Privets we became impressed with its value as a hardy variety suitable for planting at the north and began propagating it in a commercial way, and are now offering it for the first time to the Trade.

**DESCRIPTION**

The POLISH PRIVET is almost identical in habit of growth with the well known California Privet. Very free upright growth,

glossy leaf a dark bluish green, which characteristic color it retains throughout the entire season, not changing in the least at the approach of cold weather, almost evergreen. Insignificant small white blossom, borne sparingly.

Owing to its vigorous growth it makes a dense mass when sheared, an ideal plant for Topiary designs and a very rich looking plant when grown singly or in masses. Botanical name, Ligustrum Polishi.

**BEHAVIOR**

The very severe weather conditions of the winter of 1911-12 gave us a practical test as to the hardiness of the various kinds of Privet on the market. The POLISH PRIVET came through the winter under various conditions and in different sizes without the slightest injury, which cannot be said of a single other kind on the market.

In this section of the State, both kinds of the Amurensis were severely injured and in some instances were killed down to the ground. The California Privet was so badly injured that extensive plantings of it were taken out.

There has long been a demand for a Privet that was hardy in the northern part of the country and especially the northern part of Illinois, Iowa and Nebraska. Before this there has not been a single variety of the many kinds introduced that would withstand the winters this far north without more or less injury.

**TESTIMONIALS**

We wish to call particular attention to the following strong testimonials. Prof. A. T. Erwin has been at the head of the Horticultural department of the Iowa State Agricultural College for a good many years and is a man of wide reputation in his profession. The College has done more than any other institution in America in introducing new and hardy Trees, Fruits, Shrubs and Plants adapted to the severe weather conditions of the northwest.

PROF. A. T. ERWIN of the Iowa State Agr. College, Ames, Iowa—"Polish Privet perfectly hardy."

PROF. V. V. WESTGATE, University of Nebraska Exp. Sta., Lincoln, Nebr.—"Polish Privet best for Nebraska conditions, perfectly hardy."

SWAIN NELSON & SONS Co., per S. G. NELSON, Chicago, Ills.—"Consider Polish Privet very valuable for the north."

A. BRYANT & SON, Princeton, Ills. (Nurserymen)—"Polish Privet perfectly hardy, stood severe winter of 1911-12."

M. J. WRAGG, Nurseryman and Landscape Gardener, Des Moines, Iowa—"Polish Privet absolutely hardy in Northern Iowa."

POLISH PRIVET has passed the experimental stage, as we have had it on our Grounds for twelve years and the College had it under observation and test over twenty, besides the Nebraska College giving it a thorough test.

Being absolutely hardy, it is bound to be in great demand. Parties interested should write for further information and wholesale prices on the different grades. Usual Terms to the Trade.

**IRVIN INGELS, LA FAYETTE, ILLINOIS**



# ORNAMENTAL STOCKS

NURSERIES  
420 ACRES

**WE GROW**

FRUIT TREE STOCKS—All Sizes.  
300 varieties of Conifers, 1 to 4 years old.  
1200 varieties of Ornamental Trees and Shrubs, 1 to 3 years old.  
1600 varieties of New and Old Ornamental Trees & Shrubs in all Sizes.  
250 varieties of Climbing Plants.  
400 varieties of Conifers, 1 to 4 feet high.  
400 varieties of Perennials.  
800 varieties of New and Old Roses.

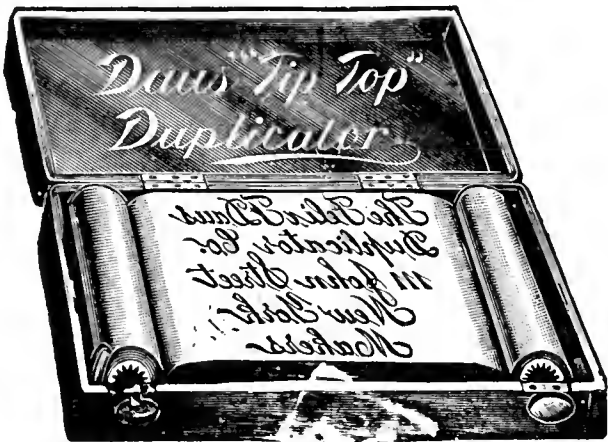
We Have No Agents.  
Write direct to us and  
ask for **WHOLESALE  
CATALOGUES**

TRANSON BROS. & D. DAUVESSE'S NURSERIES,

16 Route d'Olivet

**BARBIER *and* CO., Successors,**

Orleans, France



Circular of Larger Sizes upon request.

**DON'T TAKE OUR WORD!**  
**TRY IT YOURSELF FOR 10 DAYS WITHOUT DEPOSIT**

If not satisfactory, simply return it and no questions asked.  
The **Daus' Improved Tip Top Duplicator** is the result of 25 years' experience and to-day is used and endorsed by thousands of business houses and individuals, including prominent Railroad and Steamship Companies, Standard Oil Company, U. S. Steel Corporation, etc.  
Our negative rolls now have our new "**Dausco**" Oiled Parchment Back, giving additional strength and efficiency.  
**100 copies** from pen-written and **50 copies** from typewritten originals—**Clear, Clean, Perfect.**

Complete Duplicator, cap size,  
Price \$7.50 less special discount of 33 1/3% . . . . . **\$5.00**

**Felix A. G. Daus Duplicator Co. . . . . Daus Building, 111 John Street, New York**

**JUST RECEIVED** from G. W. Van Gelderen's Nurseries at Boskoop (Holland)  
**V.G.'S QUALITY**

- AZALEA MOLLIS**, budded, 12 to 15 inches (100 to a case).
  - ACER POLYMORPHUM ATROPURPUREUM** (Japan Maple) 3 to 4 feet (100 to a case).
  - ARISTOLOCHIA SIPHO** (Dutchman's Pipe) 6 feet (500 to a case).
  - BOXWOOD**, bushes, 1 foot (in cases of 75 and 150 each).
    - " " 1 1/2 feet (50 to a case).
    - " standards, 18-in. crown (50 to a case).
    - " globes (perfect round) 12x12 inches (18 to a case).
    - " pyramids, 3 to 3 1/2 feet (20 to a case).
    - " " 5 to 6 feet (12 to a case).
  - JUNIPERUS PHITZERIANA**, 2 1/2 feet (20 to a case).
  - KOSTER BLUE SPRUCES**, 1 1/2 to 2 feet (40 to a case).
    - " " " 3 to 3 1/2 feet (25 to a case).
    - " " " 3 1/2 to 4 feet (20 to a case).
  - RHODODENDRONS**, Hardy Parsons (select varieties), 1 1/2 to 2 feet, budded plants (100 to a case).
- Also some mixed caselots with Roses, Conifers, Box, Rhododendrons, etc., etc.

**ALL TO BE SOLD IN CASELOTS ONLY AND F. O. B. NEW YORK.**  
**W. B. VAN EYK, 14 Stone St.**  
Care of MALTUS & WARE NEW YORK, N. Y.

**The North Eastern Forestry Co.**  
"We Raise Our Own Trees"



Our surplus of stock for 1913 delivery includes millions of Trees of the most reliable species.

You can secure Trees of equal quality at such reasonable prices nowhere in the United States.

Write for samples and prices of the species in which you are chiefly interested.

Catalog sent on request.



**THE NORTH EASTERN FORESTRY CO.**  
NEW HAVEN, CONN.]

# Increase Your Trade This Spring with Harrison's Fruit and Ornamental Trees

Your year-after-year sales are the ones on which your business is built. The first sale may not yield the profit you expect, but on the second and third order your money comes back. It is the **Repeat Orders** that count.

For more than a quarter of a century we have been growing nursery stock that brings the repeat orders to the nurseryman who furnishes Harrison-grown Fruit Trees, Ornamentals and Shrubs to his customers. The select varieties we offer are grown in our own nurseries—from the root to the bud they are Harrison products.

When you fill your orders with trees grown this way you can be dead sure of the results; you can **guarantee** the stock to be just what you say it is, for you **know** it will prove to be just what you sell it for. Write to us about your needs for immediate delivery—wire if you are in a hurry. We can make shipment within a few hours.

## SURPLUS LIST

### APPLE, two-year

	1 n.	6-7 ft. $\frac{1}{16}$	5-6 ft. $\frac{5}{8}$	4-5 ft. $\frac{1}{2}$	3-4 ft.	2-3 ft.
Apple of Commerce.....	50	200	100			
Baldwin.....		400				
Ben Davis.....		1000	1000	700	200	
Bismarck.....	30					
C. R. June.....		400	90	40		
Carthouse.....		50	50			
Coffelt Bty.....		100	50	50		
Cooper's Market.....		75	100	50		
Ely. Melon.....		100	20			
Ely. Strawb.....		40	10			
Fanny.....		50	25			
Flora Belle.....	10	20				
Golden Sweet.....	150					
Gravenstein.....		500	300	200	150	
Ingram.....	20	30				
Jeffries.....		30	20			
Jonathan.....			200	200		
Kennard's Choice.....		100	40			
Late Raspberry.....		70	60			
Lawver.....	110	30				
Longfield.....	30	40				
Mann.....	60	210	20			
Mo. Pippin.....		300	40	20		
Myrick.....	60	20				
Nero.....		500	300	200		
N. W. Greening.....		1000				
P. W. Sweet.....		500	20			
Paynes L. Keeper.....		60	50			
Pewaukee.....		20				
Rambo.....	360	180				
Red Astrachan.....		90	400			
Rolfe.....		100	20			
Senator.....		80				
Smith's Cider.....	380					
Springdale.....	40	50				
Stark.....	700	1500	700			
Strawb. (Chenango).....		150				
Sutton Bty.....		25	20			
Townsend.....	10	20				
Va. Bty.....	10	20				
Winesap.....				1000		
Yel. Trans.....	1000	6000	1000			
Yel. Belleflower.....	50					
York Imperial.....	5000	25000	20000	5000	1500	

### CRAB APPLE, Two-year

Golden Bty.....	140	700	180	70		
Martha.....		50	50			
Transcendent.....	100	1000	300	400	400	60

### APPLE, one-year

	6-7 ft. $\frac{1}{16}$	5-6 ft. $\frac{5}{8}$	4-5 ft. $\frac{1}{2}$	3-4 ft.	2-3 ft.	1-2 ft.
Alexander.....		300	400	500		
Baldwin.....	1000	10000	15000	15000	3000	500
Ben Davis.....		3000	5000	1500	1000	500
Bismarck.....		100	50	50		
C. R. June.....		100	300	90	75	
Carthouse.....		50	50	300	50	
Coffelt Bty.....		50	100	50	50	
Cooper's Market.....			200	50		
Dominie.....		100	290	100		
Duchess.....			500	400	400	
Ely. Harvest.....	400	1500	1500	900	500	500
Ely. Colton.....			90	50	50	
Ely. Strawb.....			280	20	50	
Ensee.....		45	50	100	60	
Fallowater.....		250	1500	100	200	



	6-7 ft. $\frac{1}{16}$	5-6 ft. $\frac{5}{8}$	4-5 ft. $\frac{1}{2}$	3-4 ft.	2-3 ft.	1-2 ft.
Fanny.....		40	100	75		
Fourth of July.....		400	1000	1000	400	500
Gano.....	900	3500	6000	4000	2000	2000
Golden Sweet.....	90	90	40			
Gravenstein.....		600	500	500	180	100
Grimes' Golden.....					1000	500
Jeffries.....			90	100	50	
Jonathan.....		800	4000	5000	5000	3000
King.....	200	700	1000	500	300	50
Kennards' Choice.....			160			
Lankford.....			40	40		
Lawver.....			60	60		
Limbertwig.....			200	100	50	
Longfield.....			40	100	40	
M. B. Twig.....					500	500
Mann.....			100	50	50	
McIntosh.....					5000	3000
Mo. Pippin.....		100	300	90	20	
Myrick.....		100	100	175		
Nero.....	700	600	1400	4000	4000	1000
No. Spy.....					500	
N. W. Greening.....	250	2500	3500	2500	1000	1000
P. W. Sweet.....		1000	2000			
Pewaukee.....		70	70			
Porter.....			50	50	50	
Rawles Janet.....			250	100	50	
Rambo.....		1000	200	400		
Red Astrachan.....	250	2000	1000	900	900	1000
Rolfe.....		150	50			
Rome Bty.....					5000	5000
Salome.....				70	250	
Scott's Winter.....			100	150		
Smith's Cider.....		200	180	120		
Smokehouse.....		200	300			
Spitzenburg.....		200	500	400	100	100
Springdale.....			200	50	50	
Stark.....	1000	2800	1100	500	500	500
Stayman's.....			12000	30000	30000	30000
Strawb. (Chenango).....		200	200	200	70	
Sweet Bough.....			200	400	300	
Tallman Sweet.....		400	800	500	500	50
Walbridge.....			100	100		
Wealthy.....				2000	2000	500
Wm. Ely. Red.....						
Winesap.....	400	5000	7000	7000	7000	4000
Winter Banana.....		800	500	500	400	400
Wolf River.....	1000		500	400	400	100
Yel. Trans.....		190	5000	5000	5000	2000
Yel. Belleflower.....		70	50			
York Imperial.....		10000	15000	15000	10000	10000

**Harrison's Nurseries**  
J.G. HARRISON & SONS PROPRIETORS  
BERLIN MARYLAND

Designed and written by The McFarland Publicity Service, Harrisburg, Pa.

W. F. HUMPHREY, PRINTER, GENEVA, N. Y.



# THE NATIONAL NURSERYMAN



MAY, 1913

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

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Established 1847.

OFFER A GENERAL LINE OF

### Choice Nursery Stock

## CHERRY and STD. PEAR

of Extra Fine Quality.

If you are in the market for superior trees write  
us for prices.

### I. E. Ilgenfritz' Sons Co.

MONROE, MICH.

## MOUNT ARBOR NURSERIES

E. S. WELCH, Proprietor

136 Center St., Shenandoah, Iowa

We offer one of the largest and most complete  
lines of high quality NURSERY STOCK in the  
United States.

Immense stock of Apple, Cherry, Peach, Currants,  
Gooseberries, Ornamentals.

### APPLE

Over 100 varieties, including the best commercial  
sorts, such as Jonathan, Delicious, Duchess, Gano,  
Grimes' Golden, McIntosh Red, Stayman's Winesap,  
Wealthy, Winesap, etc.

CORRESPONDENCE AND INSPECTION INVITED

## EVERGREENS

### OUR LEADING SPECIALTY

RHODODENDRONS, HEMLOCKS, WHITE  
PINES, BOX BUSH. A general collection  
of specimen ornamentals.

ALSO

NORWAY MAPLES, PIN OAKS, IBOTA  
PRIVET, SPIRAEA VAN HOUTTEI  
by the thousand.

### Andorra Nurseries,

WM. WARNER HARPER, Prop.

CHESTNUT HILL, PHILA., PA.

## THE JEWELL NURSERY CO.

*Wholesale Nurserymen*

LAKE CITY, MINNESOTA

Established 1868

1500 Acres

Everything in the line of Nursery Stock  
suited to Northern culture.

*Let us figure with you*



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Apple of Commerce.....	50	200	100			
Baldwin .....		400				
Ben Davis.....		1000	1000	700	200	
Bismarck .....	30					
C. R. June.....		400	90	40		
Carthouse .....		50	50			
Coffelt Bty.....		100	50	50		
Cooper's Market.....		75	100	50		
Ely. Melon.....		100	20			
Ely. Strawb.....		40	10			
Fanny .....		50	25			
Flora Belle.....	10	20				
Golden Sweet.....	150					
Gravenstein .....		500	300	200	150	
Ingram .....	20	30				
Jeffries .....		30	20			
Jonathan .....			200	200		
Kennard's Choice.....		100	40			
Late Raspberry.....		70	60			
Lawver .....	110	30				
Longfield .....	30	40				
Mann .....	60	210	20			
Mo. Pippin.....		300	40	20		
Myrick .....	60	20				
Nero .....		500	300	200		
N. W. Greening.....		1000				
P. W. Sweet.....		500	20			
Paynes L. Keeper.....		60	50			
Pewaukee .....		20				
Rambo .....	360	180				
Red Astrachan .....		90	400			
Rolfe .....		100	20			
Senator .....		80				
Smith's Cider.....	380					
Springdale .....	40	50				
Stark .....	700	1500	700			
Strawb. (Chenango).....		150				
Sutton Bty.....		25	20			
Townsend .....	10	20				
Va. Bty.....	10	20				
Winesap .....				1000		
Yel. Trans.....	1000	6000	1000			
Yel. Belleflower.....	50					
York Imperial.....	5000	25000	20000	5000	1500	
CRAB APPLE, Two-year						
Golden Bty.....	140	700	180	70		
Martha .....		50	50			
Transcendent .....	100	1000	300	400	400	60

### APPLE, one-year

	6-7 ft. $\frac{1}{16}$	5-6 ft. $\frac{5}{8}$	4-5 ft. $\frac{1}{2}$	3-4 ft.	2-3 ft.	1-2 ft.
Alexander.....		300	400	500		
Baldwin .....	1000	10000	15000	15000	3000	500
Ben Davis.....		3000	5000	1500	1000	500
Bismarck .....			100	50	50	
C. R. June.....		100	300	90	75	
Carthouse .....		50	50	300	50	
Coffelt Bty.....		50	100	50	50	
Cooper's Market.....			200	50		
Dominie .....		100	290	100		
Duchess .....				500	400	400
Ely. Harvest.....	400	1500	1500	900	500	500
Ely. Colton.....			90	50	50	
Ely. Strawb.....			280	20	50	
Ensee .....		45	50	100	60	
Fallowater .....		250	1500	100	200	

	6-7 ft. $\frac{1}{16}$	5-6 ft. $\frac{5}{8}$	4-5 ft. $\frac{1}{2}$	3-4 ft.	2-3 ft.	1-2 ft.
Fanny .....		40	100	75		
Fourth of July .....		400	1000	1000	400	500
Gano .....	900	3500	6000	4000	2000	2000
Golden Sweet.....	90	90	40			
Gravenstein .....		600	500	500	180	100
Grimes' Golden.....					1000	500
Jeffries .....			90	100	50	
Jonathan .....		800	4000	5000	5000	3000
King .....	200	700	1000	500	300	
Kennards' Choice.....			160		50	
Lankford .....			40	40		
Lawver .....			60	60		
Limberville .....			200	100	50	
Longfield .....			40	100	40	
M. B. Twig.....					500	500
Mann .....			100	50	50	
McIntosh .....					5000	3000
Mo. Pippin.....		100	300	90	20	
Myrick .....		100	100	175		
Nero .....	700	600	1400	4000	4000	1000
No. Spy.....					500	
N. W. Greening.....	250	2500	3500	2500	1000	1000
P. W. Sweet.....		1000	2000			
Pewaukee .....		70	70			
Porter .....			50	50	50	
Rawles Janet.....			250	100	50	
Rambo .....		1000	200	400		
Red Astrachan .....	250	2000	1000	900	900	1000
Rolfe .....		150	50			
Rome Bty.....					5000	5000
Salome .....				70	250	
Scott's Winter.....			100	150		
Smith's Cider.....		200	180	120		
Smokehouse .....		200	300			
Spitzenburg .....		200	500	400	100	100
Springdale .....			200	50	50	
Stark .....	1000	2800	1100	500	500	500
Stayman's .....			12000	30000	30000	30000
Strawb. (Chenango).....		200	200	200	70	
Sweet Bough.....			200	400	300	
Tallman Sweet.....		400	800	500	500	50
Walbridge .....			100	100		
Wealthv .....				2000	2000	500
Wm. Ely. Red.....						
Winesap .....	400	5000	7000	7000	7000	4000
Winter Banana.....		800	500	500	400	400
Wolf River.....	1000		500	400	400	100
Yel. Trans.....		190	5000	5000	5000	2000
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Over 100 varieties, including the best commercial  
sorts, such as Jonathan, Delicious, Duchess, Gano,  
Grimes' Golden, McIntosh Red, Stayman's Winesap,  
Wealthy, Winesap, etc.

CORRESPONDENCE AND INSPECTION INVITED

## EVERGREENS OUR LEADING SPECIALTY

RHODODENDRONS, HEMLOCKS, WHITE  
PINES, BOX BUSH. A general collection  
of specimen ornamentals.

ALSO

NORWAY MAPLES, PIN OAKS, IBOTA  
PRIVET, SPIRAEA VAN HOUTTEI  
by the thousand.

### Andorra Nurseries,

WM. WARNER HARPER, Prop.

CHESTNUT HILL, PHILA., PA.

## THE JEWELL NURSERY CO.

*Wholesale Nurserymen*

LAKE CITY, MINNESOTA

Established 1868

1500 Acres

Everything in the line of Nursery Stock  
suited to Northern culture.

*Let us figure with you*

Now is the time to place your orders for  
**Direct Importations**

from European Nursery Centers

**FRENCH FRUIT STOCKS**

Apple, Pear, Myrobolan, Mahaleb, Mazzard Seedlings, Manetti, Multiflora and Quince stocks. Also full line of Ornamentals for lining out, from Vincent Lebreton's Nurseries, Angers. Best packing and grading. December or February shipment from France.

**Boskoop, Holland, Nursery Stock**

Boxwood (pyramids, bushes, standards, ball-shape, etc). Roses, Tree Roses, Rhododendrons, Azaleas, Magnolias, Koster Blue Spruce, Evergreens, Hydrangea P. G., etc., etc., from Schaum & Van Tol, Boskoop.

**DECIDUOUS TREES**

Norway and Schwedler Maples, Tiliac, Elms, Chestnuts, Oaks, Planes, Thorns, etc., etc., etc., straight stems and good roots, careful selection, best packing from Union Nurseries, Oudenbosch, Holland.

Besides representing the above firms as Sole American Agents, we import to order

**FROM JAPAN AND ENGLAND**

English Manetti, Gooseberries 2 and 3-yr. (Whinham Industry, Whitesmith, etc.), Japanese Nursery Stock and Lilies.

**BAY TREES.** Standards, Pyramids and all shapes from Belgium, Fall or Spring shipment.

**RAFFIA.** Red Star Brand and four other grades; also dyed Raffia in 20 colors. **WRITE US** for catalogs, special lists, etc., stating the class of stock you are interested in.

**SHIPPING.** We have our own Custom House Dept., with shipping connections at Havre, Hamburg, Rotterdam, Antwerp, Southampton, etc.

**McHutchison & Co.**

17 Murray St.  
 New York

The Import  
 House

**SIMPSON**

is the name of the men who grow the finest

**CHERRY**

that can be produced by suitable soil, climate and expert knowledge.

Take a look at the stock or ask for a sample and be convinced of the extra quality of their

**TREES**

PEACH

ST. PEAR

APPLE—1 year, 2 year and 3 year  
 AMERICANA PLUM ON PLUM  
 COMPASS CHERRY ON PLUM

**H.M. Simpson & Sons**

VINCENNES, INDIANA

**For Winter and Spring Orders**

**WE OFFER THE FOLLOWING FROM  
 OUR MAC CLENNEY NURSERY . . .**

- 4000 **Mulberries**, mostly of Hicks variety, smooth and free from blight.
- 15000 **Figs**, mostly of the Celeste and Lemon varieties.
- 20000 **Peach**, in 2 to 3 ft., 3 to 4 ft. and 4 to 5 ft. sizes.
- 25000 **Plum on Plum**, Abundance, Burbank, Wickson, Red June, Gonzalez, and other leading sorts. Sizes  $\frac{1}{2}$ ,  $\frac{5}{8}$ ,  $\frac{3}{4}$  and 1 inch.
- 10000 **Roses**, Teas, Hybrid Teas and Climbers, all grafted very low on Manetti roots. Field grown.
- 6000 **Biota Aurea Nana**, sizes 18 inches up.
- 10000 **Biotas and other Conifers**, 12 inches and up. Conifers can be balled or shipped with naked roots.
- 25000 **Chinese Arborvitae Seedlings**, 2 and 3 year, 6 inch to 3 ft. sizes.
- 5000 **Muscadine Grapes**.
- 20000 **Trellis Varieties Grapes**.
- 70000 **Camphor Trees**, sizes 1 to 3 ft.
- 3000 **Pot Grown Eucalyptus**, sizes 3 to 5 ft.
- 4000 **Oriental Plane**, sizes from 4 to 12 feet.
- 3000 **Texas Umbrella**, sizes from 4 to 8 feet.
- 2000 **Oleander**. Field grown. 3 to 5 ft. sizes.

A general variety of Orange and Grape Fruit Trees. Could also supply limited quantities of general list of Fruit and Ornamental Trees to be used to fill in with orders.

*Stock is fine and will be sold at Right Prices.*

**The Griffing Brothers Company**  
 JACKSONVILLE, FLORIDA



# PALISADES POPULAR PERENNIALS



HARDY SHRUBBY CHRYSANTHEMUMS (NIPONICUM)

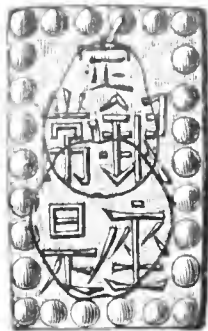
*See Description Page 9*

A. B. MORSE CO. ST. JOSEPH, MICH.

COVER OF CATALOGUE DESIGNED AND PRINTED  
FOR THE PALISADES NURSERIES SPARKILL N. Y.  
BY A. B. MORSE COMPANY ST. JOSEPH MICHIGAN

HARDY ASTER OR

# Heikes --- Huntsville --- Trees



**Huntsville  
Wholesale Nurseries**

**Huntsville, Ala.  
JESSIE S. MOSS, Prop.**

We offer for Spring of 1913  
in large quantities as usual:

## SPECIALTIES

**APPLES**—Commercial varieties, one and two year, in large supply. As fine in quality as ever grown.  
**PEARS**—Kieffers, one and two years old. A much smaller crop than heretofore.  
**CHERRIES**—On Mazzard. Two year, Bing, Lambert, Napoleon, Black Tartarian.  
**CHERRIES**—On Mahaleb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.  
**PEACHES**—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.  
**ROSES**—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.  
**PRIVET**—Amoor River (South). Retains its foliage longer and holds its color better than California Privet.  
**PECAN SEEDLINGS**—Huntsville grown from selected nuts collected along the Gulf Coast. Thin shell.

See Price List for Particulars.

Address, **HUNTSVILLE WHOLESALE NURSERIES**  
**HUNTSVILLE, ALA.**

## BOBBINK & ATKINS

**World's Choicest Nursery and Greenhouse Products**

**EVERGREENS and CONIFERS**,  
in several hundred  
kinds and varieties

**ROSES**, in all kinds  
and varieties

**RHODODENDRONS**, Hardy,  
**ENGLISH HYBRIDS**,  
Maximum and Catawbiense

**BOXWOOD**, in all shapes,  
forms and sizes

**HARDY AZALEAS**, in all  
colors and varieties.

**HEDGE PLANTS**, in all  
popular kinds

**FLOWERING SHRUBS**, in  
bush and standard forms  
in hundreds of kinds  
and varieties

**SHADE TREES**, in hundreds  
of useful and attractive  
varieties

**MAGNOLIAS** and other  
**FLOWERING TREES**

**WEeping and STANDARD**  
**TREES**, in many varieties

**JAPANESE MAPLES**, in all  
varieties and colors

**HARDY TRAILING VINES**  
and **CLIMBERS**

**HARDY VINES and CLIMBERS**  
in pots

**SPRING and SUMMER**  
**FLOWERING BULBS, ROOTS**  
and **PLANTS**

**PALMS and BAY TREES** by  
the thousands

**FRUIT TREES**,  
home-grown, imported,  
**DWARF and TRAINED**

**SMALL FRUITS**, in all  
kinds and varieties

**NUT TREES**, profitable  
kinds

**OLD-FASHIONED**, Hardy  
**FLOWERING PLANTS**, in  
thousands of kinds and  
varieties

**PAEONIAS, IRIS, PHLOX**  
**FERNS**,  
and **HARDY GRASSES**

**KITCHEN**  
**HERBS and ROOTS**

**RUTHERFORD PARK LAWN**  
**GRASS SEED**

**AUTUMN BULBS**, Dutch,  
French and Japanese kinds

Interior and Exterior  
**DECORATIVE PLANTS**, in  
a large variety

**PLANT TUBS**, in all shapes and  
sizes. Ask for special list

**VISITORS** to our nurseries  
are always welcome

**SEND IN YOUR LISTS FOR**  
**QUOTATIONS**

**Nurserymen, Florists and Planters**  
**RUTHERFORD, N. J.**

# When Nurserymen Buy Raffia



**THEY** should specify Red Star Brand. It is the best all around grade on the market, combining a guaranteed first-class quality and a very reasonable price. Nearly all Nurserymen use it, as they find it to give more satisfaction and value for the money than any other brand.

For a lower priced raffia of mixed quality we recommend Arrow Brand. In special cases where an exceptionally good grade of raffia is required, our XX Superior and AA West Coast are unsurpassed. The price though is a little higher.

**Thomas Meehan & Sons**

**DIRECT IMPORTERS OF RAFFIA**  
**DRESHER, PENNA.**

# BRIDGEPORT NURSERIES

*OFFER A GENERAL ASSORTMENT  
OF NURSERY STOCK*

**Apple, Catalpa Speciosa Seedlings**  
**Shade and Ornamental Trees**

**IN LARGE QUANTITY**

**WRITE FOR PRICES**

**C. M. HOBBS & SONS**

**BRIDGEPORT, IND.**

# Tree Protection

SCALINE will protect them all seasons of the year.

SCALINE is an oil and sulphur composition, a scalecide, insecticide and fungicide combined—three in one—and it will destroy San Jose, oyster shell, cottony maple, tulip scale, aphids, red spider, thrips, mealy bug and all sap sucking insects.

SCALINE is composed of a high grade petroleum oil and the properties of our fungicide Fungine, thus making it equally effective for the control of various fungi.

SCALINE is used at the strength of one part to twenty parts water for scale; one part to fifty parts for other sap sucking insects. It is readily soluble in water, requires no mixing, and containing no sediment can be applied through the finest spray nozzle.

SCALINE may be used as safely in the growing as in the dormant season. It is an all year round spraying material.

Gallon, \$1.50

Ten gallons, \$10

Fifty gallons, \$37.50

We believe that in SCALINE we have one of the best spraying materials on the market today for general spraying of trees, shrubs and hardy plants. We feel confident that a trial would make you a regular user of this product.

## Aphine Manufacturing Co.

M. C. EBEL, General Manager

Manufacturers of Agricultural Chemicals

MADISON, N. J.

"APHINE"  
Insecticide

"FUNGINE"  
Fungicide

"VERMINE"  
Vermicide

# FOREST TREES FRUIT STOCKS



SHIPMENTS OF OVER 200  
MILLION OF TREES  
ANNUALLY

LARGEST  
FOREST TREE  
NURSERIES  
IN EUROPE

Please write for Catalogue and  
Forest Planter's Guide to our  
American Representative:

OTTO HEINECKEN

Whitehall Bldg. 17 Battery Place  
NEW YORK

## J. HEINS' SONS

HALSTENBEK No. 152

Near HAMBURG, GERMANY

# Oriental Planes All Sizes From 1 1/4 to 2 1/2 inch Caliper

Double Flowering Peaches  
Double Flowering Japan  
Cherries, Weeping Japan  
Cherries, Flowering Apples  
Asparagus, strong 2 years  
Large and complete assortment of Flowering Shrubs

## Hoopes, Bro. & Thomas Co.

MAPLE AVENUE NURSERIES  
WEST CHESTER, PA.

PHILADELPHIA

OFFICE:

222-3-4-5 Stephen Girard Bldg.,  
21 So. Twelfth Street

Have you seen and examined the quality and  
finish of our

## Rawhide Brand of Shipping Tags and Tree Labels

printed or plain, strung or wired?



This stock is especially adapted to the most severe usage, being thoroughly waterproof & weather-proof. "Once used, always used."

Send for samples and prices. Our reference are the largest nursery men in the United States.

## The Denney Tag Co.

WEST CHESTER, PENNSYLVANIA



35TH YEAR  
**Pan Handle Nurseries**

WE OFFER A COMPLETE ASSORTMENT OF NURSERY STOCK CONSISTING OF

Apple	Poplar Carolina	Ampelopsis
Pear	Poplar Volga	Roses
Plum	Elm American	Evergreens
Cherry	Sycamores	California Privet
Peach	Mountain Ash	Buxus
Grape	Althea	Weeping Trees
Currant	Hydrangea	Catalpa Seedlings
Gooseberry	Barberries	Black Locust "
Small Fruits	Syringae	Fruit Tree "
Maple Norway	Clematis	Catalpa Speciosa Seed.
Maple Schwedlers	Honey Suckle	Etc., Etc., Etc.
Maple Silver	Wistaria	

Our stock is well grown and graded. Prices are such that it will pay to investigate. Come and see us or write.

**J. K. HENBY & SON**  
GREENFIELD, IND.

**Currants. Apple Trees  
Ornamental Trees  
Ornamental Shrubs**

No better stock or finer assortment in the country.

*Prices are right*

Our Spring Trade List can be had for the asking.

**ARTHUR BRYANT & SON**  
PRINCETON, ILLINOIS

**WOOD LABELS**

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

**Dayton Fruit Tree Label Co.**  
South Canal St., Dayton, Ohio

**Ornamental Trees, Shrubs,  
Evergreens, Vines, Etc.**

HIGH  
GRADE



LARGE  
VARIETY

Correspondence solicited. Price list upon request.

**W. B. WHITTIER & CO.**  
South Framingham, Mass.

WE OFFER FOR SPRING 1913:

**Norway Maple Silver Maple  
and Carolina Poplar**

IN CAR LOTS ALL SIZES  
GET OUR PRICES

**The Greenbrier Nursery Co., Inc.**  
GREENBRIER, TENNESSEE

**SCARFF'S PLANTS**  
equal to any  
on the market

Small Fruit Plants our specialty for 25 years. **100,000 Transplanted Raspberry**, Blackberry and Dewberry plants, fine for critical retail trade.

Currant, Gooseberries, Grapes, Horseradish, Asparagus, Rhubarb, etc. Hardwood cuttings and layers in large quantities. See our wholesale list before placing your order.

**W. N. SCARFF**

NEW CARLISLE, OHIO

**HORTICULTURE**

A Magazine of Trade News and Cultural Information for the NURSEYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

*Published Weekly*

SUBSCRIPTION \$1.00 PER YEAR

**HORTICULTURE PUBLISHING CO.**  
11 HAMILTON PLACE. BOSTON, MASS.



**400,000 Small Fruit Plants** in storage for early spring trade, 1913. Blackberry root-cutting and sucker plants; Red, Purple and Black Raspberry; Downing Gooseberry, one year, No. 1; Dewberry; Asparagus two and three year roots; Rhubarb one, two and three year whole roots and divided. Trade List ready Feb. 1st. Let me quote you on your list of wants.

**P. D. BERRY, Dayton, Ohio**



Another "Business Getter"

# What Our Organization Consists of

**Our Printing Plant** is one of the largest and most modern equipped plants in the country for producing High-Class Nursery and Seed Catalogues as business getters.

**Our Engraving Plant** is modern in every respect, and is turning out nothing but the best of Engravings.

**Our Art Department** consists of an efficient staff of artists, specialists in designing Nursery and Seed Catalogues.

**Our Line of Stock Cuts** is complete and true to name—only original engravings used.

**Our Service Department** is efficient in every respect for planning, compiling and writing of your catalogue and other advertising matter. **Our Motto** is efficiency.

**Our Business** is the production of Nursery and Seed Catalogues as business getters.

## Waxahachie Nursery Company

Capital Stock \$20,000.00

J. R. MAYHEW, President-General Manager

Waxahachie, Texas

Waxahachie, Texas, October 23-1912.

Fruit-Grower and Farmer,  
Mr. W. A. Garrahrant,  
St. Joseph, Mo.  
Dear Mr. Garrahrant:

I acknowledge receipt of your favor of October 21st, enclosing B/L covering shipment of several lots of catalog, for which we thank you.

We note, with a great deal of pleasure, what others have to say in regard to our catalog and, as I wrote you in our last letter, we believe this is one of the very best catalogs yet issued. We are very much inclined to compliment you, as before stated, in the main the catalog is highly satisfactory. We do not believe there is a catalog in the South-west that will compare with it and every one to whom we have shown same agree with us.

We are getting exceedingly anxious to receive balance of catalogs that they may go out in answer to our many inquiries for same, and we are free to confess that if this catalog does not get business we believe business cannot be had by catalog route. Understand, we do not believe that this business cannot be had, for we are more firmly convinced than ever before that the planter will welcome the opportunity of buying direct from the nursery at a saving of money and under a guarantee of decidedly better service.

With best wishes,

Yours very truly,

WAXAHACHIE NURSERY COMPANY.

J. R. M.

"The Best Catalog in the Southwest." 'Nuff sed.

J. A. Yager

Established 12 years ago

W. R. Martin

## YAGER NURSERY CO.

All Kinds of Nursery Stock

FREMONT, NEBR. Feb. 25, 1912.

Fruit-Grower & Farmer,  
St. Joseph, Mo.

ATTENTION OF W. A. GARRAHANT.

Dear Sir:

We received your statement today, and we are enclosing you draft in payment of our bill.

We thank you for the splendid job you did for us, and would ask you to return to us the three cuts that you have of ours. You are the first concern we have done business with that has furnished the kind of paper, type and ink that they agreed to furnish. We appreciate this. Next year we will issue 100,000 catalogs at least, but we will do our own editing and furnish our own cuts, and when we get ready to print our catalog, we are going to place the order early and take plenty of time so that there need not be so much hurry.

Our orders are coming in fine, and we look for a mighty good year's business. If I am ever in St. Joseph, I will call and visit the Fruit-Grower.

Yours very truly,

YAGER NURSERY COMPANY

Stan. L.Y.

Per

No Agents, We Sell Direct - 7 Home Banks O.K. Us.

The finished product was just as we agreed to furnish it. This is an example of our policy of Square Dealing.

America's foremost authorities upon horticultural and agricultural subjects are at your command in our Service Department. Such facilities are worthy of your particular attention, for they bring to the production of your catalogue the technical knowledge which insures best procurable results. Our corps of experts are directly in charge of the productions of this house, and their co-operation with our advertising department means not only individual distinction, but business getting originality to your catalogue. Our superior service is maintained for your benefit.

## FRUIT-GROWER & FARMER

PRINTERS, DESIGNERS, ENGRAVERS, PUBLISHERS  
P. O. Box 1277, SAINT JOSEPH, MISSOURI

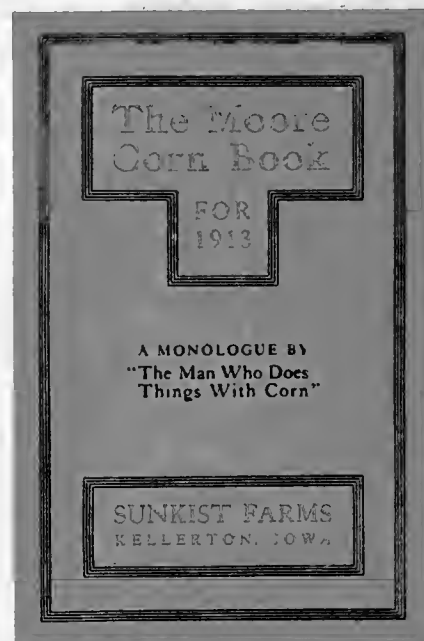
# Unsolicited Proof of the Pudding

Read every word of this circular and the letters from customers who have tasted the "Pudding"

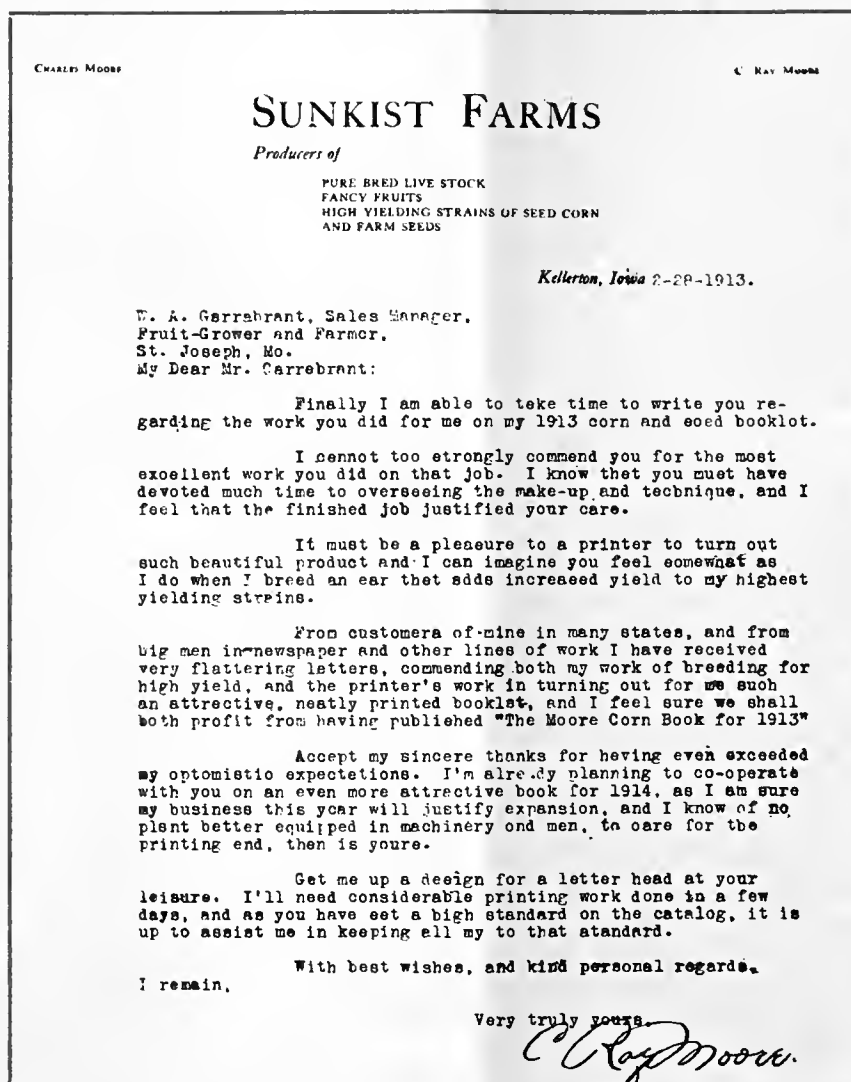
## "The Proof of the Pudding is the Eating"

We are offering a pudding to a limited number of Nurserymen and Seedmen this year by getting out their catalogs, and certainly want the live Nurserymen and Seedmen who are interested in a business getting catalog to get in touch with us at once. We produce the business pullers.

From September 15 to February 15 Fruit-Grower and Farmer organization had all they could produce day and night. This year we have increased our output more than double and are in a position to plan, design, engrave and print more catalogs consequently than we produced last year.



"A Business Getter"



The Finished Product Exceeded His Optimistic Expectations

able business for you and get you out a catalog that will be a business getter. We would like to hear from you at your earliest convenience. We have to place at your disposal our "Special Catalog Service Department" in charge of highly experienced designers, printers and writers who are students of the intricacies of horticultural printing. Join the satisfied class that uses Fruit-Grower & Farmer service and quality printing

After reading the letters reproduced herein, perhaps hearing expressions from many others of our customers, you can readily see that it is going to be to your advantage to get in touch with us at once on your next catalog. Let us start immediately to plan your next campaign, submit you plans and estimate on your catalog and other literature. Our plans and estimates are sent entirely subject to your approval, knowing if we are allowed to submit you such that you will nominate us as your catalog and advertising producers and counselors. Let us build up a bigger, better and a more profit-



"Another Business Getter"

**FRUIT-GROWER & FARMER**  
PRINTERS, DESIGNERS, ENGRAVERS, PUBLISHERS  
P. O. BOX 1277, SAINT JOSEPH, MISSOURI



## SEEDLING EVERGREENS BY THE MILLIONS

Arbor Vitae	Jack Pine
Austrian Pine	Norway Spruce
Black Hill Spruce	Pinus Ponderosa
Colo. Blue Spruce	Pitch Pine
Concolor	Red Spruce
Douglas Spruce	Scotch Pine
Engelmanii Spruce	White Pine
European Larch	White Spruce

All sizes. Ask for prices.

### SPECIAL QUOTATIONS ON LARGE ORDERS

Also the following **APPLES** in 1-2", 5-8" and 11-16" sizes at special prices:

Ben Davis, Duchess, Florence, Gano, Hiberna, Iowa Beauty, N. W. Greening, Okabena, Pat-ten's Greening, Peerless, Peter, Pewaukee, Scott's Winter, Soulard, Strawberry Crab, Transcend-ent, University, Virginia, Wealthy, Whitney and Wolf River.

**SHERMAN  
NURSERY COMPANY**  
CHARLES CITY, IOWA

## Unsold Surplus in Peach NEW HAVEN NURSERIES

NEW HAVEN, MO., Dec. 10, 1912

	5/8 up 4 1/2 to 6 ft.	1/2 to 5/8 4 to 5 ft.	3/4 to 1 1/2 3 to 4 ft.	2 to 3 ft.
Alexander .....	1660	660	1500	1500
Belle of Georgia .....	1020	920	900	600
Carman .....	3500	5500	3160	4900
Capt. Ede .....	4100	5190	3560	4440
Champion .....	2970	1120	1120	4700
Chair's Choice .....	430	680	780	660
Crawford's Early .....	5000	4220	3520	2460
Crawford's Late .....	4580	3960	3160	3000
Chinese Cling .....	490	20	440	380
Emma .....	70	60	80	160
ELBERTA .....	35250	23640	22920	13060
Fitzgerald .....	1280	540	780	500
Foster .....	1070	1440	2160	1900
Greensboro .....	440	300	360	380
Gold Dust .....	330	600	1140	1480
Heath Cling .....	780	1460	3100	2320
Henryetta .....			80	120
Hiley .....	1380	1000	600	440
Matthew's Beauty .....	570	220	240	220
Mayflower .....	160		540	1912
Miller Cling .....	425	342	223	185
Mt. Rose .....	112		212	265
O.M. Free .....	195	265	165	115
Ringgold Cling .....	65	325	765	925
Salway .....	2512	541		883
Sneed .....	1254	562	862	685
Smock .....	365	222	245	345
Stump .....	131	245	423	612
Triumph .....	1845	985	685	582
Thurber .....	255	184	223	224
Wheatland .....	655	625	925	1125
Wonderful .....	312	282	315	412

The above peaches are clean, smooth, high grade.  
Write for Prices.

THE  
ABOVE  
PEACH  
ARE  
CLEAN,  
SMOOTH  
AND  
HIGH-  
GRADE  
  
WRITE  
FOR  
PRICES

**New Haven Nurseries**  
NEW HAVEN, MO.

## Cyclopedia of American Horticulture

L. H. BAILEY

IN FOUR VOLUMES

The NATIONAL NURSERYMAN has made special arrangements with the publishers of this great work and now offers it to Nurserymen on *special easy monthly terms*, \$2.00 per month for ten months. The work shipped by express prepaid on receipt of first installment and coupon below filled out.

Practical instructions on every subject connected with Horticulture. Four handsome quarto volumes; 2,800 original engravings, 50 full plates; 2,016 pages and 4,357 articles; Total plants accounted for 24,434.

Fill out this coupon and mail with first payment:

SPECIAL ORDER BLANK.

National Nurseryman,  
Rochester, N. Y.

Please enter my name as a subscriber for the new CYCLOPEDIA OF AMERICAN HORTICULTURE to be sent to me, charges prepaid, complete in four illustrated volumes, bound in green cloth. I inclose \$2 and agree to pay \$2 monthly for nine months after delivery until \$20 is paid.

Signature .....

Address .....

Town.....State.....

Reference .....

NOTE:—Send Money by Check or Post Office Money Order.

**THE NATIONAL NURSERYMAN**

218 Livingston Building

Rochester, N. Y.

## Franklin Davis Nursery Co.

BALTIMORE, MD.

### WE OFFER FOR SPRING 1913

**APPLE**—1 and 2 year.

**PEACH**—Will have a nice lot of smooth trees in good assortment of varieties.

**CHERRY**—1 and 2 year.

**PEAR**—1 and 2 year.

**ASPARAGUS**—1 and 2 year.

**CALIFORNIA PRIVET**—1, 2 and 3 year, or carload lots—fine, bushy plants.

**ORIENTAL PLANES, CAROLINA POPLARS, NORWAY MAPLES, SILVER MAPLES.**

**AMERICAN ELMS** and a general assortment of ornamental stock.

SEND IN A LIST OF YOUR WANTS

### WANTS.

We want small Evergreens and Shrubs for transplanting—What can you offer?



## THE SEASONS OVERLAP

**W**HILE we were still shipping Apple and Pear Seedlings of last year's growing, our drills were busy planting our new crop. This drill is planting four rows at a time, twenty-four inches apart, it covers fifteen acres a day. We have two of these drills running, in order to get the seed into the ground early. This gives a long growing season and allows stocks to mature thoroughly. Apple seed seems to require a certain length of time to grow and if planted early, matures early--planted late, matures late. When maturing late stocks are often dug before being properly ripened. This drill is planting eighteen good seeds to the foot of row. One bushel and one peck to the acre.

Land we are planting, shown in cut, is ideal seedling soil--perfectly level--never planted to seedlings or trees before and we confidently expect it will produce those high quality stocks that we take pride in furnishing our customers every year.

**F. W. WATSON & CO., Topeka, Kansas**

*Apple and Pear Seedling Specialists*

# The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

Vol. XXI.

ROCHESTER, N. Y., MAY, 1913

No. 5

## PORTLAND, OREGON, THE MECCA OF THE NURSERYMEN

### Thirty-eighth Annual Convention of the American Association Will be Held in June

#### Attractions of the Locality

The 1913 convention of the American Association of Nurserymen will be held in one of the fastest growing cities in the whole country. No other city of the same class can show such tremendous advance during the year just passed as this vigorous Pacific Coast metropolis.

The year was conspicuous for important achievements. In all lines it was a twelve-month of prosperity, growth and expansion. The tremendous crops produced throughout the territory of which Portland is the center, contributed very largely to the favorable showing for 1912. Extensive railroad construction and the carrying forward of large industrial projects gave great assistance in maintaining prosperous conditions and the statistics of the year reflect a consistent advance in all lines of activity.

Bank clearings of Portland for the past year amounted to almost \$600,000,000 and postal receipts were well over \$1,000,000. Building permits reached a total value of \$14,781,757; the city spent \$4,484,857 in street and sewer improvements and hard surface streets were increased to a total of 272 miles. The city paid nearly \$1,000,000 for new school buildings and grounds; the extension of the water system cost \$790,041. Portland has paid much attention to its parks and streets, while its buildings as a rule would be a credit to any city on the continent. Its people are decidedly optimistic at the beginning of the new year and believe that the future holds more for them than even the bountiful past.

The city has been incorporated only 52 years and it now has a population of 265,000. With the opening of the Panama Canal, the continued improvement of the Portland harbor and its approaches, so as to give the full benefit of the opening of that great waterway, the construction of additional railway lines, both electric and steam, bringing a constantly widening territory tributary to Portland and the settling of the vacant lands of the state by a producing population, Portland's future is secure and its people never more optimistic than now.

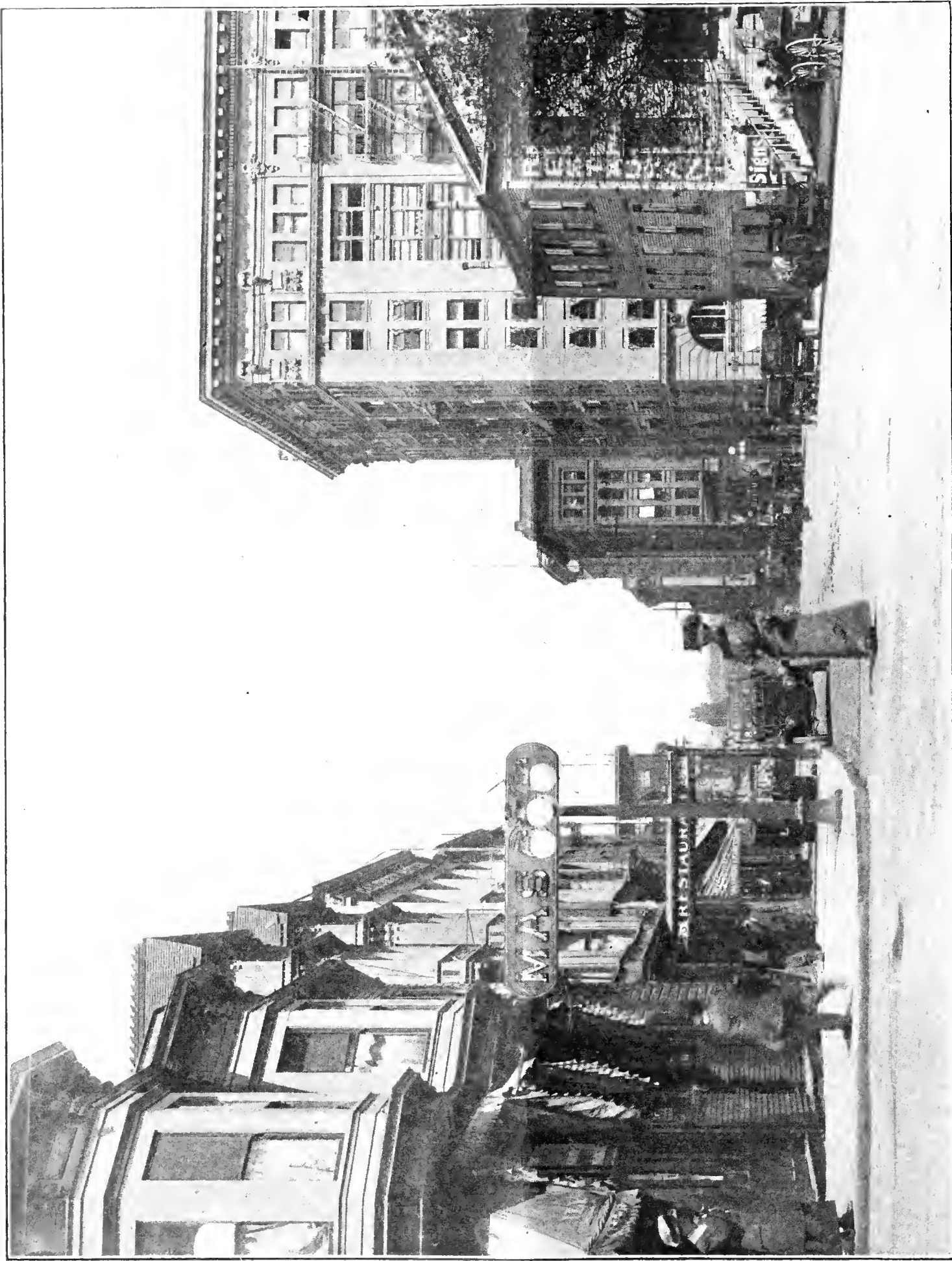
#### PORTLAND'S ATTRACTIONS FOR TOURISTS

When the nurserymen of the country come to Portland for their annual convention next June, they will come to a land of remarkable scenic attraction. This region is noted, more than anything else, for its variety of scenery, which ranges from the most rugged and forbidding mountains to the charming vistas of its farming country. Lakes, rivers and dashing mountain streams combine to make this section one to suit the most exacting taste. The drear monotony of the prairies is lacking and instead, forest, mountain, and stream arrest the eye and charm the beholder.

Portland as a tourist center is as yet comparatively little known. California has been exploited for years but the lands further north have suffered because of the lack of widespread knowledge reaching the traveler in regard to its hitherto unknown beauties. This lack of advertising is being remedied, however, as more and more the people come to know the attractions of this region and those who have been here are the best possible boosters.

There are many notable things about Portland that appeal to the traveler, best of all is that they are so close at hand and so readily accessible. Mt. Hood, that seems to tower over the city like a sentinel on guard, is easily reached by trolley and auto-stage and its summit can be gained by a short trip from Portland. This mountain is a notable peak and from its top a remarkable panorama is spread before the eyes. Two states lie at the feet of the spectator and rivers and mountain ranges make up a remarkable picture. Other snow-capped peaks are readily accessible from Portland, but if less rugged mountain scenery appeals, the Cascade, Coast and other ranges offer innumerable lesser peaks and a wilderness of foothills where the sportsman may get the best of hunting and fishing. No less imposing than the line of snow-capped mountains seen from Portland is the Columbia River Gorge, which every good tourist must see if he is to view the best scenery of the American continent. The palisades of the Hudson appear small when compared with the gigantic





A STREET IN PORTLAND, OREGON

basalt cliffs between which the Columbia forces its way to the sea. Waterfalls more than 800 feet high drop down these precipices and break in wreaths of mist below. Forests cover the mountains through which the Columbia rushes, and, although this great scenic section is so near Portland that one short day's trip takes the tourist there and back, the beauties of the gorge are absolutely natural, with a primeval wildness that appeals to all. Words fail to describe the grandeur of this great canyon—it must be seen to be properly understood. Tourists may visit it from Portland either by a comfortable steamer trip of one day, or by train up either side of the river and return the same day.

The view to be had from Council Crest, an eminence to the west of Portland, is one of the most unique sights to be found anywhere. This vantage point is reached by street car line in 20 minutes from the heart of the city, following a route that winds along the hillsides, giving many delightful views of the city below. Arrived at the summit of the Crest, the traveler finds a marvelous panorama spread out at his feet. He overlooks the whole city and its environs, the Willamette and Columbia rivers, and follows the latter stream with his eye far on its way to the sea. He looks over into Washington, and five snow-capped mountains stand in a row along the Cascade range on both sides of the Columbia, forming a background for the tremendous picture.

On the top of Council Crest one stands 1200 feet above the city. On one side is the city and on the other a wonderful expanse of farming country, mountains and rivers stretching away to the horizon. Several counties are seen and forests and farms alternate in the picture. Vancouver, across the river in Washington, is in plain view. Oregon City, to the south, and Hillsboro, to the west, each in a different county, are also in sight, and various small hamlets throughout the farming country make up a delightful landscape. One would have to travel the world over to find another such prospect. Naples has a somewhat similar one, not as good according to experienced travelers. Lookout Mountain, near Chattanooga, offers a fine lookout but like Mount Tamalpais, in California, is less accessible than is Council Crest.

The nurserymen will be interested in Portland because of its claim to being the Rose City. It is the contention of people of this city that nowhere else on the continent are these flowers grown so extensively as here. Rose hedges line the streets in the residence districts and they bloom in riotous profusion almost the whole year through. During the annual Rose Festival each June, countless roses are used in parades, in decorating automobiles, vehicles and horses and prizes are awarded for the best blooms grown in competition by amateurs. The lavish display of perfect roses during the Festival seems sheer extravagance to Eastern visitors, who never see such perfect flowers outside a greenhouse.

There are many points of historic interest near Portland. Vancouver, Washington, an hour away by trolley, was an early Hudson Bay Post and is now a military post. It is beautifully located on the shore of the Columbia River. Oregon City is another nearby point that is closely linked with the early history of the state. The Hudson Bay Company long had an outpost there and that was the home of the beloved Dr. John McLoughlin. Falls in the Willamette

River at that point make it a manufacturing center and much of the electricity used in Portland is generated there.

The beautiful Clackamas River, where Kipling fished, as told in his American Notes, is reached readily by electric cars. This rapid stream has been harnessed in several places to furnish electricity for Portland and the surrounding country.

The ocean beaches offer an attractive trip for a day from the city. The traveler follows the Columbia River, either by rail or by boat, and the Oregon and Washington beaches are widely known for their rugged beauty.

Salem, the state capital, is an hour and a half away by interurban train. This trip takes one through as fine a farming section as can be found anywhere. Steamers that ply on the Willamette and Columbia rivers offer pleasant excursions and one may enjoy the beauties of Oregon Landscapes in this way with a minimum of effort.

Great forests of fir, pine, spruce and cedar form one of the chief sources of Oregon's wealth, and Eastern people are usually much interested in seeing these forest giants standing in their native state. Little journeys from Portland will take one into the heart of these forests where he can see logging operations carried on, and visitors will also be interested in seeing the giant logs cut into lumber at the city sawmills.

Visits to some of the famous orchard tracts along the Columbia and Willamette Rivers are well worth while; Portland parks have a natural beauty that is unique in city park systems on the continent. The Chinese quarter offers quaint sights for the tourist, while a tour of the harbor where ships of many nations are seen loading and discharging freight is of much interest to those from inland country.

One of the greatest charms Portland has for the visitor is the home spirit that prevails everywhere. There are no tenements. The pride of the home-owner is evident throughout the city in the wealth of roses in every yard, green, well-kept lawns and the shade trees that line the residence streets.

The visiting nurserymen will find Portland's climate a delight even in Mid-Summer. One never suffers either extreme of temperature here. Destructive storms are unknown and nights of hot-sultry discomfort become only a memory to one who spends his Summers here.

Visitors to the nurserymen's convention here next June will find Portland and the surrounding region to have many varied attractions for the traveler and that this city deserves to rank with Los Angeles as a gathering point for tourists on this Coast.

## THE CONVENTION

Secretary John Hall, has issued the convention folder. If you have not received one, write to 204 Granite Building, Rochester, New York, and be sure that if you have not already renewed your membership do it at the same time. Advertisements for badge book must be sent in before May 15th. Hotel Multnomah will be the headquarters, and the rates are very reasonable. Delegates west of Rochester write to Mr. M. B. Fox, care of the Rochester Lithographing Company, Rochester, New York, concerning your tickets.

# THE CHINESE ARBOR VITAE

By F. T. RAMSEY

I was very much pleased in reading in a recent issue an article on the Chinese Arbor Vitæ, but the writer did not say all that can be said in its favor.

And he has not known them so long as we for he says they were introduced from China about twenty years ago, while I

## FOREMOTHERS OF VALUABLE HYBRIDS

The more dwarfish compact and pyramidal forms so popular for formal planting in the south are of the same blood as Chinese but do not transplant so easily as do their more open growing kinsmen. In planting seed from common



A tree grown from seed of Chinese Arbor Vitæ, with foliage like a Pyramidal Cypress—Rosedale Arbor Vitæ on left.

enclose a photo of a tree at San Angelo that we sold thirty or thirty-one years ago. We commenced selling them thirty-eight years ago.

They are grown easily from seed and one rarely dies in transplanting. Two years ago of one lot of 950 three to four foot trees all lived but two trees. I do not know the northern limit of their range but I know they go as far as Kansas, and extend south to the gulf. They seem to reach perfection in the south part of the Texas Panhandle in the arid atmosphere.

They are doubly appreciated here because we cannot grow the American Arbor Vitæ, I doubt if one can be kept alive two years. Their range barely comes into the sandy humid north eastern part of our state.

Chinese one gets a small percent of dwarf compact types. I suppose Berekmans' Nana originated in that way.

Mr. Otto Locke of the Comal Springs Nursery in that way originated the Bonito, and that is Spanish for pretty. It makes a perfect ball in an intense green and propagates and transplants easily.

The peagreen Rosedale Arbor Vitæ came from seed of a Chinese of smooth pyramidal outline that grew near a blue Japan Cedar, *Retinospora squarrosa*. I believe I am the only person living that remembers seeing thirty years ago the two parents on the grounds of the Rosedale Nursery while Mr. Wm. Watson was living and I also saw the two or three first seedling Rosedales in the nursery rows.



## A SPORTY CHILD

He refused to set a price on one but said he would give me one and he sent me what proved to be the most beautiful and is now scattered everywhere. I recently saw specimens near Red River, 125 miles northwest of Ft. Worth.

As those know who have grown Rosedales in large numbers, about one in a thousand after we have long, warm rainy spells will show a sport and these sports are all alike, rather a part growing pyramidal tree, just the same as the Arbor Vitæ parent—the mother.

## A LOMBARDY EVERGREEN

A good many years ago we found in a row of seedling Arbor Vitæ a tree that looked almost exactly like a pyramidal Cypress. (*Cupressus Pyramidalis*). It is surely a hybrid and a fine cypress stands to the southeast of the Arbor Vitæ from which the seed were gathered, and the wind generally comes from that direction when pollenization is most likely to take place. This tree grows from cuttings like a willow, almost, and one rarely or never dies in transplanting. We suspect if some one noted for producing hybrids had produced this he would call it the most valuable and beautiful evergreen in existence. Once or twice we have seen the mercury here drop from up about ninety down to zero in a day and never has the leader or terminal bud been hurt at all. The tree in the picture had never been trimmed.



A Rosedale Arbor Vitæ 18 years old—10 ft high

## SEEDLINGS OF AN UNLIMITED NUMBER OF SHAPES

While we mean, and generally are understood as meaning, the open fast growing trees when we speak of Chinese, we must not forget that what is commonly called Golden is a Chinese too, and the whole tribe likes our climate. In one of the parks at San Antonio, we found among a lot of Chinese Arbor Vitæ one tree that is certainly a cross with our big native Cypress (*Taxodium distichum*) and it was a tree that commanded admiration; twenty feet tall, with horizontal branches six to eight feet and from the side branches hung pendulant limbs half the size of a pencil and three or four feet long. It took but a moment to decide on Bridal Veil as a name for it. It grows reasonably well from cuttings but does not seem to feel well on an exposed location on black lime land. We have had two seedlings like the old one, sold under the name of Weeping or Pendulata or Filiformis.

## CAN BE SHAPED AT ANY AGE

A Chinese Arbor Vitæ say twenty feet high may be cut back at any point or outline, even to a stump four feet high and it will at once cover itself with green. They, (Pyramidal Hybrids grace green or beauty green) possess the same quality but Rosedale and most of those of smooth outlines will not respond to such treatment.

Truly the Chinese Arbor Vitæ has not had the appreciation due it, either for its own self or as a mother of a great host of beautiful seedlings which include every form or type from a globe to that of a lombardy poplar.

One cold day on the plains a man wished he had a grove to protect his cattle, a bystander said why not build a wind break of lumber. He said it was not so good. It was disputed. Another bystander said they could settle it on a certain ranch which had a row of Arbor Vitæ ten feet high and also a solid board fence the same height. So they borrowed a sample wind mill on a low portable tower and found it ran furiously at any distance behind the fence and stood still behind the hedge, both near to it and back away.

We have a Japan Tamarix (*T. Jap. Plumosa*) growing among some Chinese Arbor Vitæ that

has a limb on it that seems to be a perfect evergreen—a sport. If it proves to be, it adds something very valuable to the list of the landscape men.

## LARGE TREES CAN BE MOVED

Two years ago we shipped to the City Park at El Paso, six hundred miles, forty-two trees, not one of which was under sixteen feet in height, and every tree is living today and in perfect health.

## LAST

May groups of those of beautiful form be planted to please the eye of man and groves of them be planted to shelter him and his animals from dust and cold winds.

Mr. Henry Kallen of Kallen Lünemann, Boskoop, Holland, sailed again on S. S. Noordam from Rotterdam to make his annual call on the trade. Shipping over here in Holland kept us busy from the middle of January. His headquarters are at Maltus & Ware, 14 Stone Street, New York City.

# KEEPING FRUIT TREE BUDS BY THE "ICE BOX METHOD"

By G. HALE HARRISON, Berlin, Maryland

The keeping and selecting of fruit tree buds is one of the fundamental, and one of the most difficult problems to the nurserymen. There are very few nurserymen in America who handle their buds in the same manner, therefore, there is a varied opinion as to what is the best method. In former years most of the practicable methods of handling buds were tried by the Harrison Nurseries at Berlin, Maryland, sometimes with fair success, but very often with expensive failures.

part of the buds, and the part under the eyes to turn brown. The browning of the "bud eye" cannot always be detected by the naked eye unless the "stick" is considerably water-logged. If a bud, in which the "eye" is browned or partly browned, is put in a tree it will almost invariably die. Thus, it is apparent that it would be an endless job to examine every bud before it was put into a seedling.

It has been proven by numerous experiments that buds



For a few years after the writer began to work in the nursery, he noticed quite an irregular stand of buds in the peach and apple blocks. At that time no one could honestly say what caused a fair stand of buds one year, and almost a total failure the next, although the same methods were used and most of the same men were employed. These frequent failures caused the various nurserymen to investigate whether or not there was a better way of handling buds than the "Bucket Method," which was the one then most commonly used.

The buds used in the "Bucket Method" were either from the nursery or orchard, but mostly from the former. This method was very simple and easy. The buds were kept in water from three to six inches deep in a bucket from the time they were cut from the parent trees until they were used. The buds in the bucket were generally exposed to the wind and scorching sun during the working hours which caused the water to become warm in a short time, thus causing the bud "sticks" to draw up large quantities of water. If the bud "sticks" remained in the water for any length of time, they became water-logged, thus causing the "eyes," which are

from a bearing orchard are much stronger than those from the nursery row, although we must admit that trees grown from buds which came from the nursery will grow taller but not as strong in caliper in a year as those from the orchard. The buds used in the so-called "Ice Box" method came from profitable bearing orchards, which are true to name, free from all injurious pests and fungus diseases.

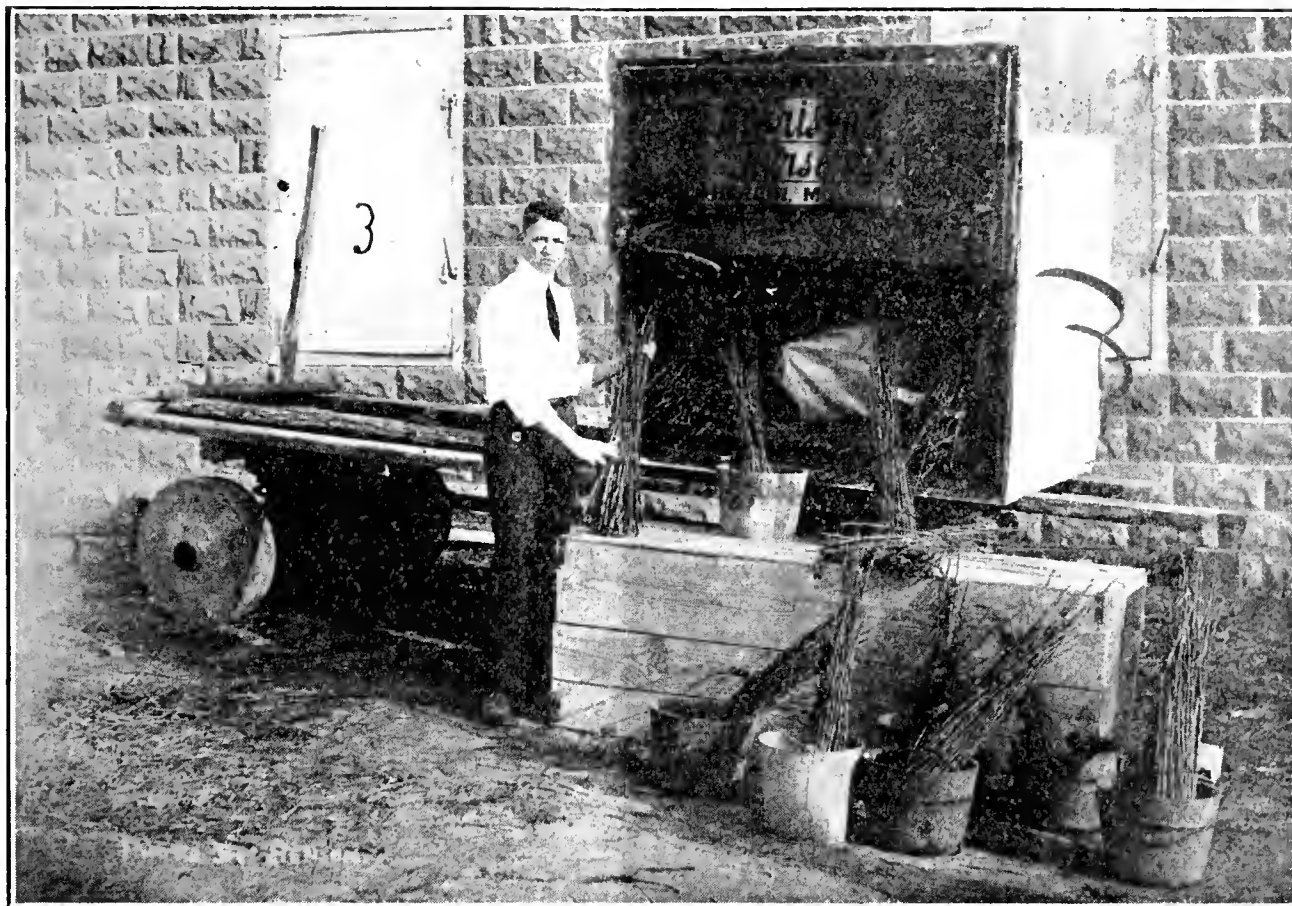
It is very important that a man who is well trained in the nursery business should do the selecting and cutting of all the buds. Do not allow a gang of men to do the cutting because their standard of selection would be different and there would likely be several mistakes. Immediately after the bud sticks are cut they are sprinkled with water and placed in a cool, shady place which is protected from the wind. The bud sticks are then leafed, that is the leaves are cut off with a sharp knife, thus leaving about a quarter of an inch of the stem, which protects the eye of the bud. Only the well ripened part of the bud stick is saved during this operation. After the bud sticks are leafed they are labeled and placed on a box in the sun in order that the outer surface might dry. Only one variety undergoes the operation at one time.



After the buds are dried they are placed in the fumigating box which will clear the bud sticks of all injurious insect pests. The fumigation of buds, when properly done, is a most efficient and practicable way of keeping nursery stock free from injurious insects.

The fumigating box is 4 ft. long, 2 ft. wide and 2½ ft. high, inside measurements. The walls of the box consists of three thicknesses of lumber, each layer running in a different direction. The spaces between the boards are filled with a preparation of tar, which helps to keep the box air-tight. Ordinary building paper is placed between each layer of boards. Around the edges of the lid there are several layers of canvas which helps to keep out the air. The chemicals

which is not dangerous. As soon as the cyanide is dropped in the acid and water, there is a bubbling and sizzling similar to that produced by a piece of red hot iron in cold water. The result of this chemical action is hydrocyanic acid gas, which is known in liquid form as prussic acid. Hydrocyanic acid gas has an odor somewhat similar to that of peach pits, but do not try to test it because if some of the gas is inhaled it will cause instant death. Plants are less injured by a short exposure to a relative large amount of gas than by a long exposure to a relative small amount, and also that a stronger dose in shorter time is more destructive to the insects affecting the tree. The resisting power of a tree is dependent largely upon the open and closed condition of the breathing pores, the



used for generating hydrocyanic acid gas used in fumigation are:

1. Fused cyanide of potassium.
2. Sulphuric acid.
3. Water.

Cyanide should be guaranteed 98-99 per cent. which is practicably chemically pure. Do not use cyanide much below this strength. The best grade of commercial sulphuric acid, with a specific gravity of at least 1.83, should be used. A grade known as "chamber" acid used ordinarily in the manufacture of fertilizers will not do, and under no circumstances should it be employed. Water from any source will suffice, the only requisite being that it should be clean. In combining the chemicals, first measure the acid in the glass beaker marked "ounces" on the side, and put it in any container such as an earthenware crock. Second, measure water in the same beaker and pour it on the acid. Third, drop in the cyanide, wrapper and all, close the door quickly and leave the desired length of time. When water is poured into the vessel with sulphuric acid, some heat and fumes are given off,

peculiarities of the cell contents and the temperature of the enclosures (box). Use from 0.05 to .1 or .105 grams of cyanide of potassium per cubic foot of the air space enclosed. Expose about half an hour.

Immediately after the fumigation is over, the buds are taken out and sprinkled with water. Then the buds are wrapped in bundles with wet sacks. Much precaution must be taken here, because if the buds are not dampened and cooled quickly they are likely to spoil. The buds are put into the ice box which contains about 700 lbs. of ice. The buds generally remain here from one to twelve hours or more in order that most of the heat might be removed. The bud sticks "plump up" while in the ice box, but there is no danger of them water-logging as in the case of the "Bucket Method." The lower the temperature the better the success with the buds. Always keep the box full of ice. Buds can be kept a week or more by this method without any signs of damage, but with the other methods it was impossible to keep the buds in good shape for any length of time.

The ice box is 5 ft. long, 3 ft. wide and 3 ft. deep, inside measurements. On the outside of this box there are two



layers of  $1\frac{1}{4}$  in. board, one layer making right angles with the other. Between these two layers of board there is ordinary tar paper. There is a 6 in. space between the double outer wall, and the single inner one. This space is filled with sawdust. The inner wall is made out of first class flooring, which makes the inner compartment air-tight. The inner compartment is covered with tin in order to keep the inner wall from rotting, and it also helps to keep the box air-tight. There are three sections in the inner compartment. The middle section is used only for ice, while the other two are used for the storing of the bud sticks. The edges of the lid are covered with canvas so as to make the whole box air-tight. The lid consists of four layers of board between which there is no space.

the ice box made almost a perfect stand, while those kept in the bucket only gave a partial stand. These buds were cut from the same trees and budded at the same time and on the same kind of seedlings in adjoining rows. We also observed that the iced buds seemed to knit faster to the seedling than the others. So in 1911, our entire budding of several millions of peach, apple, pear, plum and cherry trees was handled in this way with remarkable success. The buds came through the winter in prime condition, so the same method was used for handling the buds in 1912, during which season we budded over five millions of fruit sticks. At the present writing the buds which were put in during the summer of 1912 are showing almost a perfect stand. With these two years' experience



The ice box is kept on a truck so that it can be carried from one block of seedlings to another. The box must be kept locked so that the budders will not disturb the contents. It is best to let only one man have the key and allow him to distribute the various varieties of buds to the budders. This one man is able to control the situation of distributing small quantities of buds to a gang of over a hundred men and boys as they need them.

In 1910 we budded about 3,500,000 of peach which only produced us about 500,000 merchantable trees. The budding was in charge of an old, experienced man, but we found his methods of handling buds impracticable, hence we were forced to adapt something different. At this point is where the writer was given authority to take charge of the budding. He, alone, conceived the idea of using a refrigerator box filled with ice in order that buds might be kept cool and in a dormant condition. This method has been a success from the very beginning and has saved our firm several thousands of dollars.

Our first experience in using ice was in 1910 with Bartlett pear buds, with the result that the buds which were used in

of handling buds on a large scale, using the "ice box" method, and the fact that we have had the best stand of buds we have ever had during our quarter of a century's experience in the nursery business, I take this opportunity of giving you our experience in handling buds through the "Ice Box" method.

Enclosed I hand you my check for \$1.00 for renewal of my subscription to the NATIONAL NURSERYMAN.

Yes, the NURSERYMAN meets with my approval. It has been greatly improved recently.

Yours respectfully,  
JOHN W. MAHER.

I am well pleased with the NATIONAL NURSERYMAN and shall continue to take it. It is a valuable magazine to all nurserymen.

I am, yours truly,

J. R. JONES,

Forest Home Nurseries,  
Dill Rapids, S. D.

F. E. Williams of the Dansville Nursery Co., Dansville, N. Y., says: "We value your publication—appreciate the April number greatly."

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ROCHESTER, N. Y., MAY, 1913.

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Western Association of Nurserymen—President, Frank A. Weber, Nursery, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

## FOREIGN INSPECTION

It would be well if Foreign nurserymen who hope to do business with the United States became familiar with the recent legislation in this country, concerning the entry of nursery stock. Regulation No. 6 just issued by the Department of Agriculture and published on another page of the NATIONAL NURSERYMAN, states very clearly that nursery stock will not be allowed to enter the United States unless the invoice is accompanied by the original certificate and unless container bears a copy certificate issued by the duly authorized official of the country from which it is shipped, stating that the nursery stock covered by these certificates has been thoroughly inspected by him or under his direction, and found or believed to be free from injurious plant diseases and insect pests.

It would be well for the nurserymen of those countries where a proper inspection system is not in operation, to apply to their Government to establish one, or they will find their export business to the United States beset with difficulties. Holland which is perhaps the leading export country in this line has one already established. The inspection upon entering the United States is very thorough, where there is a suspicion that the stock is not thoroughly clean. Foreign nurserymen shipping to the United States would do well to avoid shipping anything that is not absolutely clean, even such common and well-known pests as red spider, woolly aphis, thrip should not be present if they expect to get their stock entered without considerable delay, and perhaps confiscation and destruction.

## TRUE TO LABEL

"For nothing to go out of the nursery excepting what is absolutely true to label" is a good motto for all nurserymen to live up to. He may ship a thousand orders all true to name and it is taken as a matter of course, but let him send out one plant fraudently named and the customer discovers it, it will likely do him more harm than if he had lost a hundred orders. It is very easy for the nurseryman to get the reputation of being unreliable, but he has to be in business a long time and be very strict in his dealings before he gets a reputation of reliability. It is true there is a wide gap between the nurseryman's knowledge of his plants and the buyers, and more often than not, especially in regard to the retail buyer, the nurseryman has often to interpret his customer's orders rather than send him literally just what he orders. Ignorance of botanical names, careless use of common names and duplication of variety names are some of the causes of confusion and it is no wonder that the nurseryman is tempted to label a plant just what the customer calls it rather than attempt to explain to him why he is not sending just what was ordered. Then again, many retail buyers depend on the nurseryman to use his own judgment and correct any error or evident lack of knowledge the customer may show in the making out of his order. For instance, a customer may order *Hydrangea paniculata* when he really wants *H. paniculata grandiflora*, or he may order by a common name that is applied to various kinds of plants and in all such instances it is up to the nurseryman to find out exactly what his customer wants, and send it to him rather

than fill the order just as given. The foundation of all business is built upon the satisfaction his goods give to the customer. It is well to keep these principles in mind and attempt to fill orders with a view of building a business and gaining confidence rather than immediate cash returns. The value of the nurseryman's goods are largely potential, and in this they differ from most other lines of merchandise. While perhaps it is a little unjust, it is useless to ignore the fact that there is rather more expected from the nurseryman than the delivery of goods in good condition. He is, to a certain extent, held responsible for how they turn out and the far seeing nurseryman does everything in his power by advice and every other means possible to insure that his stock will give his customer full value for the purchase money. He is wise if he turns down an order rather than ship stuff that is destined to failure, without warning the customer of his risk. Occasionally, such warning may be resented, but in the long run it wins out owing to the fact that the greatest percentage of his customers are very ignorant in horticultural knowledge. There is a growing interest in plants and many customers are beginning to know the difference between varieties, and when a certain variety is ordered it is not wise to make substitution unless he is absolutely sure that his customer will approve. The nurseryman may know that he is substituting something that is quite superior and better adapted, yet no matter how good his intentions may be the chances are that a plant sent out under wrong label is very likely to do considerable harm.

### THE INTERNATIONAL FLOWER SHOW

The doors of the Grand Central Palace, 46th St. and Lexington Ave., New York, were thrown open to the public on Saturday evening, April 5th, and the crowds who entered paid reverent homage to the combined efforts of man and nature. The occasion was the opening of the Third International Flower Show, and the officials, after months of preliminary work, the more than sixty judges, and the hundreds of exhibitors all settled back and joined the Public in their first breath taking sigh—"It's a great Show."

Such a wonderful array of flowers, foliage, plants, ferns, evergreens, etc., would attract in any form but when artistically grouped and arranged, the effect is almost beyond description. We have not space to tell of the wonderful orchids, the magnificent acacias, the thousands of flowering bulbs but to speak briefly of some of the nursery trade exhibits that helped to make the exhibition of greater interest to the public.

Bobbink and Atkins of Rutherford, N. J., showed an interesting collection of English Ivies, mostly grown in unusual forms. They showed Box bushes in topiary effects and a quantity of them. Visitors familiar with such plants through catalogues or photos of topiary gardens were delighted to see such splendid specimens. One visitor was overheard relating how the description of the trained plants in catalogues always had the greatest fascination for her. She was amused too by descriptions in Bobbink's list such as "Cavalier," good condition except one damaged arm, etc.

This firm also showed plant and tree tubs, and garden furniture.

R. J. Farquhar & Co., of Boston, Mass., showed a new gold medal plant in *Lilium myriophyllum*, a very handsome and fragrant hardy lily. Other new plants in the exhibit were *Berberis levis*, *B. brevi-paniculata* and *V. Nelsoni*, *Cotoneaster disticha* and *Potentilla Veitchii*.

J. Horace McFarland Co., Harrisburg, Pa., had a splendid exhibit of photographs and paintings of flowers and plants. They exhibited many examples of nursery seed and bulb catalogues from their presses. Their exhibit would have been more interesting had they showed some of the old time nursery and seed catalogues of but a few years past with the wood cut illustrations, the brilliant color plates, etc. They were so fine there should have been a few old time catalogues for contrast.

Mt. Desert Nurseries, Bar Harbor, Me., exhibited some fine new hardy herbaceous spiræas.

Thos. Meehan & Sons, Dresher, Pa., showed some specimens of Japanese Maples grown in standard form. Clean stems for 3 or 4 ft. with well filled heads. Blood-leaved, red and green, cut leaved and golden.

The greenhouse men were well represented. Several firms erecting model greenhouses which greatly attracted visitors. The greenhouse boiler men showed latest models of the greenhouse men. Hitchings & Co., Elizabeth, N. J., King Construction Co., N. Tonawanda, N. Y., Lord & Burnham Co., Irvington, N. J.; Metropolitan Material Co., Brooklyn, N. Y.; Pierson U. Bar Co., New York City; and Weathered Co., Jersey City, N. J., had exhibits. The following firms exhibited boilers: The Housch Boiler (J. P. Dahlborn), Weewauken Heights, N. J.; Johnston Heating Co., New York; Kroeschell Bros. Co., Chicago, Ill.

The seedsmen had many large and handsome exhibits. Peter Henderson & Co., New York, had a splendid display of Dutch bulbs in bloom. An attractive feature of the exhibit was a Dutch cottage with a Dutch garden scene. Burnett Bros., New York; John Lewis Childs, Floral Park, Long Island; William E. Marshall & Co., New York; Henry F. Michell Co., Philadelphia, and J. M. Thorburn & Co., New York, also had large exhibits.

The Press was represented by A. T. De La Mare & Co., publishers of *The Florist Exchange*, New York, and *Outdoor World and Recreation* New York.

Orchid exhibitors were Julius Røehrs Co., Rutherford, N. J.; W. A. Manda, South Orange, N. J., and Lager and Hurrell, Summit, N. J.

Other large exhibitors were: Arthur T. Boddington, New York, Caldwell Lawn Mower Co., New York, N. Y.; Arthur Cowee, Berlin, N. Y., Gladioli specialist; Robert Craig Co., Philadelphia, Hammond's Paint and Slugshot, Fishkill-on-Hudson, N. Y.; A. N. Pierson, Inc., Cromwell, Conn.; F. R. Pierson, Tarrytown, N. Y.; Pennock-Meehan Co., Phila., Revere Rubber Co., Boston and New York; and Ralph M. Ward & Co., New York.

Mr. J. Dykhuis, representing the firm Felix & Dykhuis, Boskoop, Holland, arrived in New York, April 14th, after a very pleasant trip. His address is c/o Maltus & Ware, 14 Stone St., New York.



## The Tariff

### DRAFT OF PROPOSED TARIFF BILL NOW BEFORE CONGRESS AS IT AFFECTS HORTICULTURAL PRODUCTS

Schedule G Section 219 reads: "Orchids, palms, azaleas, and all other decorative or greenhouse plants and cut flowers, preserved or fresh, 25 per centum advalorum; lily of the valley pips, tulips, narcissus, bignonia and gloxinia bulbs, \$1 per thousand; hyacinth, astilbe, dielytra and lily of the valley clumps, \$2.50 per thousand; lily bulbs and calla bulbs, \$5 per thousand; paeony, Iris Kämpferi or Germanica, canna, dahlia, and amaryllis bulbs, \$10 per thousand; all other bulbs, bulbous roots or corms which are cultivated for their flowers or foliage, 50 cents per thousand."

Schedule G, Section 220 reads: "Stocks, cuttings or seedlings of Myrobalan plum, Mahaleb or Mazzard cherry, Manetti, Multiflora and briar rose, three years old or less, \$1 per thousand plants; stocks, cuttings or seedlings of pear, apple, quince and the Saint Julien plum, three years old or less, \$1 per thousand plants; rose plants, budded grafted or grown on their own roots, 4 cents each; stocks, cuttings and seedlings of all fruit and ornamental trees, deciduous and evergreen shrubs and vines, and all trees, shrubs, plants and vines commonly known as nursery or greenhouse stock, not specially provided for in this section 15 per centum advalorum."

Schedule G, Section 221 reads: "Seeds: Castor beans or seeds, 20 cents per bushel of fifty pounds, flaxseed or linseed and other oil seeds not specially provided for in this section, 20 cents per bushel of fifty-six pounds, poppy seed, 15 cents per bushel of forty-seven pounds, mushroom spawns and spinach seed, 1 cent per pound, canary seed 1/2 cent per pound; caraway seed, 1 cent per pound; anise seed, 2 cent, per pound; beet (except sugar beet), carrot, corn salad, parsley, parsnip, radish, turnip, and rutabaga seed, 3 cents per pound, cabbage, collard, kale, and kohlrabi seed, 6 cents per pound, egg plant and pepper seed, 10 cents per pound; seeds of all kinds not specially provided for in this section, 15 per centum advalorum. Provided, that no allowance shall be made for dirt or other impurities in seeds provided for in this paragraph."

Section 561 reads: "Myrobalans."

#### FREE LIST

Section 602 reads: "Seeds, Cardamon, cauliflower, celery, coriander, cotton, cummin, fennel, fenugreek, hemp,

hoarhound, mangelwurzel, mustard, rape, Saint John's bread or bean, sorghum, sugar beet, and sugar cane for seed, bulbs and bulbous roots, not edible and not otherwise provided for in this section, all flower and grass seeds; evergreen seedlings; all the foregoing not specially provided for in this section.

EDITOR NATIONAL NURSERYMAN:

You probably have read the draft of the proposed new Tariff which, in general, embodies the wishes of the Horticultural trade; you will see though that it contains practically the same mistakes in classification as the Payne-Aldrich Tariff which took three years and more to rectify. Whatever duty is assessed, we want it to be definite and the same to all importers.

I enclose copy of letter I am mailing today to the Ways and Means Committee and if it voices your views, I suggest that you give it the fullest publicity you can with the object of having the new Tariff clear and specific and not an incentive to fraud and litigation.

Yours truly,

[J. McHUTCHISON.

Hon. OSCAR W. UNDERWOOD,  
Chairman of Ways and Means  
Committee,  
Washington, D. C.

Dear Sir:

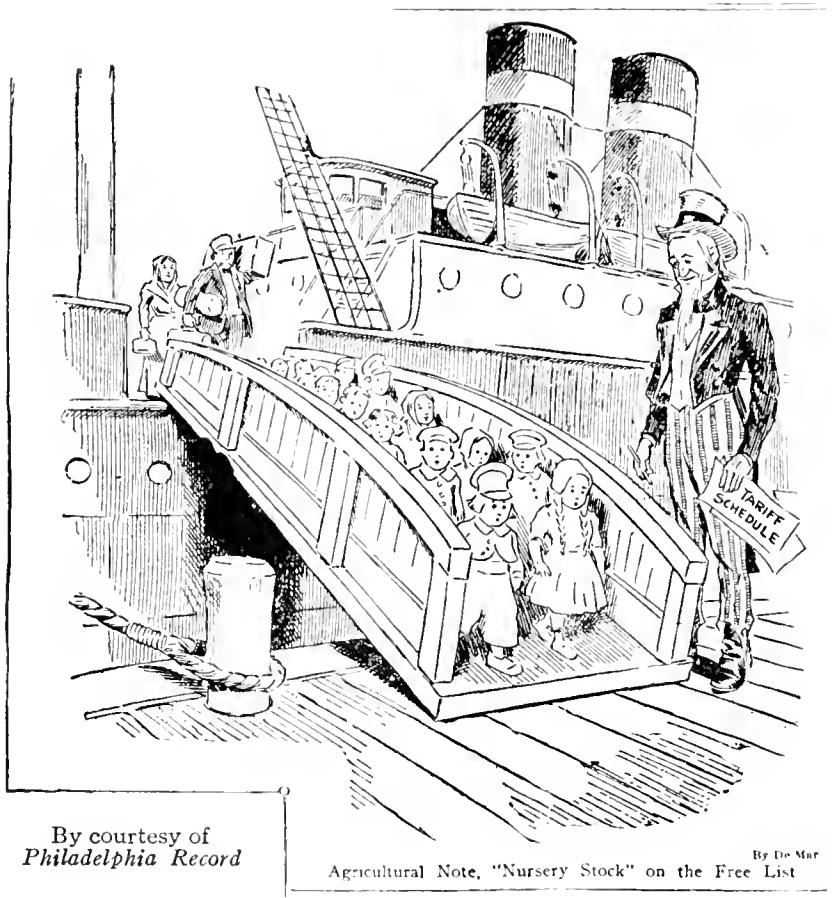
Sections 219 and 220 of Schedule G in the new Tariff bill covers horticultural products such as bulbs, plants and trees. In these articles accuracy of classification and definition is of vastly more importance than the rate of duty, because the rate of duty depends altogether upon the definition of the items.

The last Tariff contained many mistakes, which involved much expense to the importers in having the Board of Appraisers pass upon disputed points. Unless some changes are made in the wording of the two paragraphs mentioned above, we will have the same trouble over again, as the new Tariff makes exactly the same mistakes.

In the new Tariff the same items carry different rates of duty, items are classified incorrectly, we refer in particular to the following:

Section 219 rates "Orchids, Palms, Azaleas and all other decorative or greenhouse plants 25% advalorum." Section 220 rates "all Fruit or Ornamental trees, deciduous and evergreen shrubs and vines commonly known as Nursery or greenhouse stock 15% advalorum." This makes the same items 15% and 27% advalorum. Greenhouse plants and greenhouse stock are the same.

The word "Azaleas" is too vague, probably Azalea Indica is intended but it is grown in greenhouses in winter only, all



By courtesy of  
Philadelphia Record

Agricultural Note, "Nursery Stock" on the Free List

other varieties of Azaleas are grown outside in Nurseries, and are Nursery stock—not greenhouse plants.

The terms "Greenhouse stock" or "Greenhouse plants" are also too indefinite. Many shrubs and plants which grow in the open air in Southern States are known as "Nursery Stock." Further North—where the weather is colder, the same stock is grown in greenhouses and is known as "greenhouse stock." These classifications would pass if the duty were the same.

Section 220 rates "Seedlings of Myrobolan Plum \$1.00 per 1000." Section 561 rates "Myrobolans" free of duty. It should be specifically stated whether Section 561 refers to Myrobolan seeds, fruit or seedlings.

Section 220 rates "Evergreen shrubs and vines 15%." Section 602 rates "Evergreen seedlings" free, but places them under the classification of "Seeds." The same mistake was made in the last Tariff and it took three years and much expense to get a decision from the Board of Appraisers. If it is your intention to continue Evergreen Seedlings on the free list, they should not be in Section 220, and should not be classified as "seeds." Evergreen seeds and Evergreen seedlings are quite different articles.

Section 220 rates "Seedlings of Briar Rose 3 yrs. old or less \$1.00 per 1000" also "Rose plants budded, grafted on own roots 4 cents each." The principal briar rose in commerce is Rosa Rugosa, a shrub, grown from seed and sold as two or three year old. The last Tariff was also indefinite on this point and only after three years and much expense to importers was it decided it is not a rose (see T. D. No. 32926). Your Tariff should be specific in including Rosa Rugosa as a briar rose and dutiable at \$1.00 per 1000, it is sold as low as \$4.00 per 1000.

Section 219 rates "Hyacinths" as clumps instead of Bulbs, the same mistake was made in last Tariff and took years to rectify.

In these items the correct classification is vastly more important than the rate of duty. When the classification is not clear it opens a large avenue for fraud, the result being that the dishonest firm pays only half the duty the honest firm pays. Under present Tariff, honest firms are paying 25% duty on Evergreens grown by grafting or cuttings, while other firms are getting them in free of duty as "Evergreen Seedlings." The Tariff should be specific as to what an Evergreen Seedling is.

We respectfully request that Sections 219 and 220 be rewritten. We suggest no changes in the proposed rates of duty, but they should be specific and read as follows:

Section 219 should read: "Orchids, Palms, Azalea Indica and all other decorative or greenhouse plants and cut flowers, preserved or fresh, 25 per centum advalorem; Lily of the Valley Pips, Tulips, Narcissus, Bignonia and Gloxinia Bulbs \$1.00 per 1000; Hyacinth bulbs, astilbe, Dielytra and Lily of the Valley clumps, \$2.50 per 1000; Lily and Calla bulbs, \$5.00 per 1000; Iris, Canna and Dahlia roots and Amaryllis bulbs, \$10.00 per 1000; all other bulbs, bulbous roots and corms which are cultivated for their flowers or foliage 50 cents per 1000."

Section 220 should read "stocks cuttings, or seedlings of Myrobolans and St. Julian Plum, Mahaleb and Mazzard

cherry, pear, apple and quinces, Manetti, Multiflora, Rose Rugosa and Briar Rose, three years old or less, \$1.00 per 1000 plants. Rose plants, budded grafted or grown on own roots, four cents each. Stocks, cuttings and seedlings of all fruit and ornamental trees, shrubs and vines commonly known as Nursery Stock not specifically provided for in this Section 15 per centum advalorem."

Section 602 should read: "Evergreen Seedlings four years old or less"—free, otherwise there is nothing to prevent large Evergreen trees, grown from seed, say 6 feet high, coming in as "Evergreen Seedlings" free of duty.

Section 561 should read "Myrobolan Seeds" seedlings or fruits or whatever you intend to be free of duty.

The new Tariff is fair, equitable and quite acceptable. If you do not see fit to make the above noted corrections, then let us respectfully request that you make the advalorem duties in Sections 219 and 220 the same—either 15% or 25%—as there is practically no difference in these items as you have them classified.

Respectfully yours,

## WHAT SEED INOCULATION IS

BY WILLIAM GALLOWAY

Everyone who understands the growing of alfalfa and clover, admits that inoculation of the soil or seed is essential to perfect success in getting a heavy stand. Other growers of legumes, soy beans, cowpeas, vetch, the various clovers and field peas and beans, also know the value of inoculation for they have seen it increase their crops and add fertility to their soil.

For years the doctrine of inoculating with soil from an alfalfa field, carrying this soil to the field to be sown with alfalfa, has been preached, but so many times has dodder and crown gall and other diseases and weeds been transferred from one field to another that this method is now considered by all to be extremely dangerous.

The best and simplest method of inoculation is to secure the fresh legume cultures and inoculate the seed, which is a very simple matter, before sowing. The little germs that are thus put right on the seed at the time of sowing begin to breed and multiply as soon as they get into the ground. The moment the seed sprouts the germs attach themselves to the roots of the tiny plant and begin forcing it to a vigorous growth, a growth not reached by the uninoculated plant, no matter how it is grown.

It must be borne in mind that legumes which are not inoculated with these friendly little germs do not store in their roots any nitrogen from the air, but take it from the soil. To build up your soil, rotate grain with legumes that are inoculated.

## SAN JOSE SCALE

If fruit of last year was scale marked the presumption is that the trees are infested to a greater or less extent. They should be sprayed at once, and up to the time that the blossoms open, with concentrated lime-sulphur solution at the rate of one gallon to ten gallons of water to which should be added two pounds of Arsenate of Lead to each fifty gallons.

# FRUIT STOCKS

**A Thorough Discussion of the Subject by Prof. W. L. Howard,  
University of Missouri.**

Some time ago the writer of this article sent a list of questions to several of the leading nurserymen throughout the United States. These questions covered several practical points bearing upon the nursery business as now practiced. This information was desired as an aid to teaching a course in Plant Propagation in the Department of Horticulture of a middle west University. The questions together with a summary of the answers follow:

1. How are apple seeds handled previous to planting?

They may be handled in different ways. Seeds received from France come packed in powdered charcoal. They are usually received in February or early March. Such seeds are usually soaked in water for about three days, changing the water every twelve hours. They are then put into bags and placed between cakes of ice where they are kept until the nurseryman is ready to plant them. Upon receiving their seed some nurserymen stratify them in moist sand throughout the winter and plant them in early spring. Some others merely soak them in water previous to planting.

2. What do you understand by French Crab Stock?

"French crab seeds are gathered from cider mills in France and washed out of the pomace. The apples, strictly speaking, as we understand it, are not crabs. They are simply kinds of seedlings that make the most cider and in case one kind excels in producing cider, it is propagated for that purpose, but their cider orchards are not what we would call crab apple trees. Many of the trees in these orchards are grown from seed. I have been through their orchards in France; they are mostly medium sized apples and of different colors and in a good season the trees bear very heavily and have to be propped up. These native apple seed are very vigorous and far superior to seed produced from budded stock. The orchards are almost entirely in one section, called Normandy, and nearly all of the seed are shipped from LeMans, which is located southwest of Paris. In the sections where these orchards are they drink champagne cider instead of wine. The private houses and hotels gave this drink on their tables nearly every day. The French people do not grow their apples for the seed, they grow them for the cider, the seed being a side issue."

3. What is Vermont crab stock and how extensively is it now used in the United States?

The so-called Vermont crab stock consists of seed saved from the cider mills of New England. The apples for the most part seem to be native seedlings; that is, trees that have always been propagated from the seed. Mixed with this stock are seeds from cider apples of several named varieties. In other words the seeds come entirely from cider stock consisting both of seedlings and low grade fruit of named varieties.

It is thought that much stronger stock can be produced from seedling apples than from budded or grafted trees. On

this account the Vermont stock is being used less and less each year because it is found that not only are the old seedling orchards falling into decay and growing weaker all the time but the mixture of too many seeds from budded and grafted varieties has lessened the value of the stock. One nurseryman says: "The higher you breed up the apple, the less vitality the seed has."

In the north and west the Vermont crab stock seems to be used the most abundantly. In the middle west and east the French stock is used almost exclusively. The estimates by nurserymen of the amount of Vermont crab stock now used rank all the way from 5 to 75 per cent. Perhaps a conservative estimate for all parts of the United States would be not over 15 per cent.

4. Does the United States produce pear seed in commercial quantities?

Keiffer pear seed are secured from fruit growers in the eastern states to a limited extent. The little that is offered for sale comes from New Jersey and Maryland. Nurserymen believe that the Japan pear seed is far better. While most of the Japan pear seedlings come from Japan, some are now being grown by French firms, particularly during the last year. Possibly Japan stock is also grown in Holland.

5. To what extent do we grow pear stock in this country? That is, which is imported most largely the seeds or seedlings?

Practically all of the Keiffer pear stock is grown in this country. There are quite a good many Japan pear stocks grown in the United States. One of the largest importing nurserymen says: "There have never been any Japan or Keiffer pear seedlings imported in past year, but the last year or two they are growing them in Holland, Germany and France in a small way and I would not be surprised if more Japan pear seedlings are imported in the future, although they are usually grown here and in the past there have been enough of the home grown stock to supply the market."

Nurserymen seem to like the French grown pear seedlings best because the French growers transplant them soon after they start which causes them to make branched roots. These are thought to be the best for stock for budding and grafting. It is believed by many that the Japan stock are much stronger growers than the French seedlings. Some complain that the foliage of the French pear stock is not healthy in this country; at least, not as healthy as the Japan stock.

6. Are the imported pear seed or seedlings designated by definite name; that is, must the importer ask for French stock, Japan stock, etc., when ordering, or merely say he wants pear stock?

It is necessary to designate the exact kind desired.

7. To what extent is cherry stock grown in the United States? What kind is most used—Mazzard, Mahaleb, Americana, etc.; that is the percentage of each?



Very few cherry stocks are grown in America. What few are grown from the seed are the Mahaleb. To a limited extent Marianna stock is grown from cuttings. The Mahaleb seedlings are used almost exclusively in the eastern and middle states. They are imported mostly from France. Mazzard cherry stocks are used considerably on the Pacific Coast but they cannot stand severe weather like the Mahalebs. The foliage also is not as good as the Mahaleb. The season for budding the Mazzard is short. Fully 80 to 85 per cent of cherry stock used is Mahaleb; perhaps 15 per cent of the remainder is Mazzard. One nursery is trying out some Mazzard this year by grafting. These were planted in a southern state.

8. What is the best treatment to give cherry seed collected at home in order to get them to grow? How keep from sprouting or drying out during the summer?

Very few native cherry seed are used for the reason that they make trees that sprout badly. Where Mahaleb seed are grown they are gathered from the trees, the pulp washed off before they sour or become decayed, and the seed immediately packed away in sand. In the old countries where they are mostly collected the seeds are buried rather deeply in the ground under the shade of a tree. If the seeds are kept moist and cool it seems there is no danger of their sprouting that season. When winter comes they are usually taken up and stratified in boxes of sand in the usual way and put outside so they can freeze and thaw as often as they will until planting time in the spring.

9. How best to treat home grown peach seeds?

These may be treated in either one of several ways. On a small scale, or a large one either for that matter, they may be planted in the fall where they are expected to grow for budding purposes. They may be mixed with sand and placed in boxes, set on top of the ground on the north side of a building throughout the winter. They must be kept moist so they will freeze. They may also be piled up in shallow pits and covered over with sand or a thin layer of earth. Here they are kept moist and will freeze. In the spring after they have begun to sprout they are taken up and planted. Some of the largest nurserymen treat their peach seeds by keeping them in dry storage during the winter and then in spring they are soaked for two weeks in barrels of water. This is done just previous to planting. Some recommend that the peach seeds be soaked for a week in late winter and then put down in moist sand until they have sprouted. In the south the seeds are generally planted in November. Peach pits in large quantities are collected from the native seedling trees of Eastern Kentucky and Tennessee, the western part of the Carolinas and Virginia and latterly from the mountain districts of Arkansas and Oklahoma.

10. What plum stock is most used in this country—Marianna, Myrobolan, American, etc.?

Myrobolan and Americana stocks are the ones principally used in this country; the Marianna is now used very little. In the Dakotas, Minnesota, Michigan and to some extent in Iowa, Nebraska, Wyoming and other northern states, the Americana stock is most largely used. In the south and east the Myrobolan is almost exclusively employed. Some years ago Marianna was used extensively but most nurseries have

now abandoned it. Some say the Marianna is badly affected by borers. The Americana is used in the north because it alone is hardy enough to withstand the cold weather.

11. Is all Marianna stock grown from cuttings, and how extensively is such stock grown and used in the United States?

Most nurserymen say they never knew of any Marianna stock being grown from the seed, all of it being produced from cuttings. However, it has been suggested that there is one nursery located in a northern state that grows Marianna from the seed. This variety of plum rarely produces fruit in the middle west which probably accounts for stock not being grown from the seed. The Marianna grows very readily from the cuttings, however. It seems that Myrobolan stock can be purchased cheaper than the Marianna can be grown from the cuttings. The Marianna was popular a few years ago in the south but is not now. Perhaps only 5 per cent or less of plum stock now used is Marianna.

12. Do we mostly import the Myrobolan seeds or seedlings?

The seedlings seem to be almost exclusively imported. These come mostly from France although some are secured from Holland.

13. Where is the most of our quince stock grown? How propagated? That is, from seeds, layers or cuttings?

Perhaps the majority of our quince stock comes from France although some comes from England. There are two types or varieties—one being the French and the other the English. The foreign propagators grow quinces almost entirely from cuttings. They are grown to some extent from seed and to a very limited extent from layers. Quince will root very readily from cuttings in this country, particularly in the southern states, but the foliage of such stock is thought not to be as strong and vigorous as that of the French grown stock. The home grown stock has not proved to be as good for budding as the foreign grown. A big grower of stock in this country has tried quince seed but says they are very hard and unsatisfactory to make grow. He thinks very few quince are grown from the seed in this country.

14. How are forest tree seeds treated previous to planting in order to secure best results in germination?

It is not feasible to answer this in full as so many of the species of tree seeds require special treatment. Briefly, seeds such as the elm and soft maple which ripen early in the season should be planted at once. They must never be allowed to dry out. Ash seed may be planted either in the fall or early spring. If in spring, the seeds should be thoroughly moistened and allowed to freeze or at least to remain in a cool place for 3 or 4 weeks previous to planting. The same treatment should be given to box elder seed. These are difficult to stratify in boxes throughout the winter as they begin growing in early spring before the ground will do to plant them. If planted in the fall they are too apt to come up so early that they will be frosted. Hard maple seed should receive the same treatment as ash. Black and honey locust seed are treated by soaking in warm water; the water for black locust seed should not be warmer than is perfectly comfortable for the hands. Pour the water over the seeds and let them stand over night; that is, 10 to 12 hours. Fol-

lowing this all the seeds that are swollen should be removed and planted. The remainder should be treated again, perhaps with slightly warmer water, and continue this until all show signs of softening by being swollen. Those that float or refuse to be softened are discarded. Honey locust seed may be treated with water as warm as  $110^{\circ}$  to start with but they will stand  $10^{\circ}$  more without being killed. Follow about the same plan as with the black locust—that is, taking out the swollen seed after 10 or 12 hours. Sometimes honey locust seed becomes so hardened that they have to be soaked in water of almost scalding temperature. Honey locust seed from Italy may usually be sufficiently soaked by using only warm water. It is our native honey locust seed that becomes so very hard. Some hard, bony seed are treated by pouring almost boiling water over them and allowing them to stand for about two hours or until cooled. The coffee bean seed is treated in this way. If the seed coat seems to be softened, plant the seeds immediately. Russian mulberries are gathered during summer and planted the next spring without any treatment. *Catalpa speciosa* are gathered in the fall and may be planted without treatment as soon as the soil is warm in the spring.

15. At what time of year, that is, approximate time in the month, do you think best results are secured in budding apples, pears, etc.?

Of course in budding, dates will vary considerably according to latitude. The following are the principal dates mentioned: Apples, June to September; pears, June to September. In the middle west pears are budded in June and July. French stocks are budded in July while Japan stocks are usually budded through August and September; they may be budded at other times.

Cherry in the middle west is budded in August and September although the extreme dates are from June until late September. Plums and peaches are usually budded through August and September but may be budded in June and July in the south. Quinces are budded in July and August mostly.

In general all the above fruits are budded at the time when the bark peels best. Naturally this particular stage will vary greatly according to the season—that is, whether it is dry or wet; also the climate has something to do with the time of budding. In the south peaches are quite largely budded in June while in the north this would not be possible as the seedlings would not be large enough. In Missouri, which is centrally located, peach budding may begin the middle of June and continue until the middle of September, provided the summer is not too dry. Some big nurserymen have to begin as early as they can and continue as late as possible in order to get through.

16. About what date would you prefer to root-graft apple, pear, quince, etc.?

Opinions vary considerably. Most nurserymen prefer to do their root-grafting in January and February; some say if the work is delayed until March good results may be secured, if the season is such that the grafts may be planted at once. One big nurseryman says: "Usually we find that the grafts made in early March and planted in mid-April do the best, but if you have a lot of it to do, you must of course begin

earlier." It seems that it is best for apple grafts to be made early enough so that they may become thoroughly calloused while in storage before planting. If the work is done too late to permit of callousing then it seems best to plant them at once and let them callous in the ground.

17. If you were top-working apple or pear outdoors at what time would you prefer to do the work?

The time preferred is just before trees begin to grow in the spring. It seems that it is safest to begin a little too early rather than too late—that is, do not wait until after the trees have begun to put out their foliage. If very much top working has to be done, the work should be commenced early enough so that it can be entirely finished before buds begin to open.

18. What will usually be the age in months of apple, pear, etc., when budded?

Peaches are budded either in June of the same year the seeds are planted, if June buds are grown, or in late summer or early fall of the same year seeds are planted. Of course, by June buds is meant those that are budded in June and tops cut off and buds allowed to grow that same season. By ordinary peach budding is meant trees budded in August but the tops are not cut off until the following spring. Apple stock for budding consists of seedlings grown one year, then transplant and budded the second season as soon as the bark will peel nicely. Pear, cherry and quince are generally handled in this way, therefore the stocks of these fruits will be from 16 to 17 months old when budded. Quince will be from 18 to 20 months old. Nurserymen prefer to transplant apple stock as well as the others before budding in order to properly space the trees in the nursery rows; also they are said to make better root systems by being transplanted.

19. Under normal conditions of soil and season what percentage of your piece-root apple grafts do you expect to get to grow? Whole-root grafts?

Piece-root 50 to 75 per cent; whole-root 75 to 90 per cent.

20. Under what conditions of soil, etc., do you consider whole-root apple grafts to be superior to the piece-root?

There are different kinds of the so-called whole-root apple grafts—one kind being made from branched seedling roots; the other is made from seedlings with long, straight tap roots. They are all crown grafts. This is thought to be the chief advantage of the so-called whole-root grafts. The branched stocks are preferred. When these are used they are from five to eight inches long. If a straight seedling root is used it will usually be from seven to ten inches in length. The whole-root grafts, particularly those made from branched roots, are thought to possess more vitality than the piece-root sorts. On this account they are expected to withstand adverse weather conditions better and therefore make a better stand. The whole-root grafts are thought to give a higher percentage of growth over the piece-root in dry soils or in dry seasons or in soils that are rather low in fertility.

21. What percentage of your apple buds under normal conditions do you expect to take?

On the average 75 to 80 per cent. Weather conditions have a good deal to do with this.

22. What points of superiority, if any, do budded apple and pear trees possess over the grafted ones?

The unanimous verdict is that they have a better root system. It is also claimed that they make smoother and better bodied trees and that there is less likelihood of their being affected with root gall. Some eastern nurseries now bud both apple and pear exclusively; others in the West think there is little advantage in budding and only bud such trees as for one reason or another cannot be grafted or where the scions die.

### NURSERYMEN'S CONVENTION

JUNE 18-20, 1913, PORTLAND, ORE.

Have you seen the "Tentative Itinerary" covering the going journey to Portland, issued by M. B. Fox, Nurserymen's Special "Passenger Agent" of Rochester? If not, drop him a postal card at once asking for a copy.

The eastern nurserymen will get together at Rochester, June 12th, arriving in Chicago in Special Pullmans on the morning of June 13th. It is hoped that all nurserymen from the middle west and south and southwest will plan to catch the same train out of Chicago that carries these eastern Pullmans and so make up a big happy party, leaving Chicago at 9:30 A. M., June 13th, via the C. B. & Q. and Northern Pacific all traveling together on the same train thru to Portland.

If you have not yet decided to make the trip to Portland, think it over and decide to go, and as early as you can, advise Mr. Fox. It is hoped that the party will be large enough to obtain a special train from Chicago or St. Paul (this train leaves St. Paul at 10:30 P. M., June 13th, via the Northern Pacific Ry.)

It will help Mr. Fox in making his arrangements if he knows as early as possible how many to figure on.

Address for full particulars,

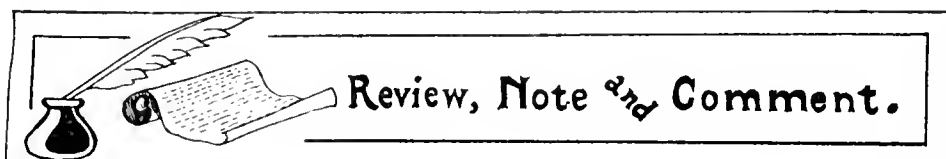
M. B. Fox,  
Care of Rochester Lithographing Co., Rochester, N. Y.

Frank W. Power, Chairman Exhibits Committee, writes: "All arrangements have been made for securing the Multnomah Hotel for holding the convention. This hotel covers an entire block, and the entire mezzanine floor, if necessary, will be turned over to the nurserymen. This contains two large convention rooms and three connecting promenade rooms, rest room for the ladies, etc. We expect to use one of the convention rooms for making a floral exhibit by the florists of Portland. The three connecting rooms between that and the convention hall we expect to devote to general exhibits. We are receiving much encouragement from the florists of Portland and the nurserymen of California and the Northwest in regard to exhibits, and expect to make this one of the features of the meeting.

The Portland Floral Society will take charge of the decorations.

J. B. Pilkington and the Committee of Arrangements are making ample provision for the entertainment of the visitors. A fine program is being prepared by Mr. S. A. Miller, Milton, Ore., and M. McDonald, Orenco, Ore. The Pacific Coast Association will turn out enmasse, and we expect to have one

of the largest nurserymen's conventions ever held in the United States at this meeting. Do everything you can to secure a large delegation from the east. Where possible they should try to arrive on Saturday the 14th, so as to take in the closing day of the Rose Festival, which is well worth any one's time, the electric parade on that evening being especially fine."



NATIONAL NURSERYMAN PUBLISHING CO.,  
Rochester, N. Y.

Gentlemen:

"We are advised that The Ward Dickey Steel Company of Indiana Harbor, Indiana, have discontinued the manufacture of Box Straps." Nurserymen who have been dealing with them will have to look up another source of supply.

The Burbank Seed Book for 1913 issued by The Luther Burbank Company is somewhat disappointing to the well posted Horticulturist. It features such plants as Gladiolus, Amaryllis, Poppies, Cosmos, etc., races of plants upon which hybridists have been working in different countries for many years. Considering the tremendous amount of credit that has been given to Mr. Burbank, it would seem as though we should expect something really new and of plants that had been improved without question, by Mr. Burbank. Those who know of the years of work that has been put upon Gladiolus by noted Horticulturists such as Veitch, Lemoine, Dean Herbert, Childs, Kelway and others, can hardly credit Mr. Burbank with the "creation" of these plants, or even improvement.

The same may be said of Amaryllis. Those who are familiar with the work of the old country hybridists and saw the exhibition at the International Show last year can hardly help but think that the Burbank Company is exploiting the works of others under Mr. Burbank's name.

Bobbink & Atkins have issued a retail catalogue of about 150 pages, very complete in all details. It is splendidly illustrated, largely with photographs taken from their own nursery. This firm is particularly strong in choice ornamental stock, such as bay trees, box wood in various shapes and choice evergreens. The list of evergreens especially, shows many sorts, rare and uncommon. It is a splendid handbook and is the work of the Horace McFarland Company.

Bureau of Plant Industry, Circular No. 116 gives an account of the Himalya Blackberry by H. P. Gould. It is certainly a very poor report of this much advertised berry. Reports were received from Texas, Florida, Georgia, Missouri, North Carolina, New York and Michigan, and the only one favorable was from Georgia, and this indifferently so, as no details were given.



### THE LATE FRANZ LUDWIG SPÆTH

The noted Horticulturist, Franz Ludwig Spæth, was descended from a very ancient family of gardeners, whose history can be traced back to the year 1680.

Christoph Spæth bought in the year 1720 a little nursery near the Halleschen Tor—now called Johannestisch—which was patronized, from the beginning, by the King Friedrich Wilhelm II. The founder of the firm was succeeded by his son, Carl Friedrich Spæth, senior from 1746–1782, who removed the business to the Köpenicker Street 154, where he was succeeded by his son of the same name, Carl Friedrich Spæth, from 1782–1831.

From the year 1831–1863 the business came into the possession of the great-grand child of the founder. Ludwig Spæth, who was in his time a well known and much beloved man. He still lives in the memory of the old Berlin people, who recall the way he used to ride out every morning through the Köpenicker Street and "Linden" to the Tiergarten (Zoological Garden) with his long white beard, often distributing flowers and money to crowds of shouting children.

His son, the Royal Agriculturist, Franz Ludwig Spæth, was born in February 25, 1839, in Berlin. After he completed his studies, at the Luisenstädtischen Realgymnasiums (Grammar School) and at the humanistischen Köllnischen Gymnasiums (High School), he studied Botany, Science of Agriculture, Chemistry, and Philosophy several terms at the University of Berlin. He had as his teachers the famous Botanist, Alexander Braun, as well as Mitscherlich and Professor de la Carde.

After finishing his studies he spent some time in foreign countries, especially in Belgium, Holland and France, in order to acquire special practical knowledge for his future vocation, that of arboriculture.

In the year 1864, at the age of 25, he took possession of his father's establishment, then only 20 acres, which up to that time was specially devoted to the raising of potted plants, palms, hyacinths and tulips.

Out of this industry the Horticulturist Spæth laid the foundation of the "*First Big German Tree-Nursery*" through which he became famous. As the people, up to that time, were obliged to get good fruit from France, roses from Luxembourg and pines from Holland or Belgium, Spæth began to raise all these plants. The trade in the Köpenicker Street grew bigger and bigger, there was no more room left for any extension and so Mr. Spæth removed his nursery in the beginning of the seventies, to the Britzer Feldmark, between the village of Britz and the district of Treptow, called Baumschulenweg, where it soon occupied 900 Prussian acres. Today this immense ground borders on the Canal of Teltow and the Forest of Kanner. It extends from Britz to Johannisthal. In connection with this is the new Tree-Nursery of the firm Spæth in Neu Falkenrehde near Potsdam, and the land now owned by this family, for the culture of

garden-product and arboriculture, contains about 2000 acres.

Mr. Spæth created not only the largest tree-nursery in Germany, but also the largest in the world.

While formerly the young German gardeners had to go to France or to England to complete their education, they now try to get a place in this German Nursery. Most of the best fruit and flowers are cultivated here, such as the magnificent deep dark lilac, "in memory of Ludwig Spæth," which is found today all over the world, as well as the Hartriegelstrauch (*Cornus alba Spæthii*) with its shining bright yellow leaves, etc. Every year the firm of Spæth sends out collectors to Central Asia and North America who send new and rare plants to Baumschulenweg, where they are raised and acclimated.

The principal markets of the firm are not only Germany, Austria-Hungary and Russia, but also America and the German Colonies. Between 1890 and 1900 Mr. Spæth opened a studio of Landscape Architecture for which the surroundings of Greater-Berlin offers a rich field for work.

The deceased was one of the founders and for many years the President of the "German Pomological Club." He was also President of the "Society of Garden Lovers of Berlin," called today "German Horticulture Society," and is an Honorable Member of all the big Horticultural Societies in Europe.

On his 70th birthday the Royal Councillor Spæth established a pension for his hundreds of employees, by giving 100,000 Mk. He also maintained a big Kindergarten in Baumschulenweg. Here he created a first class scientific object of interest the laying-out of a magnificent park

with over 6000 of the most beautiful and rarest kinds of trees and a rich Rosarium. This Park is historic and remarkable through the many memorial trees planted by princes, statesmen and politicians. In this way is the dwelling-house shaded by two Linden trees, planted by Prince Bismark and Count von Moltke in memory of their visit to the establishment.

In personal intercourse the Horticulturist, Councillor Spæth won everybody with whom he came in contact.

He always made use of his rich knowledge for the benefit of everybody. He was an active member of the Prussian Railroad Councillors of the township of Teltow, Substitute Administrator of Berlin-Britz, etc. He took great interest in the exposition of industry in Berlin, 1896. The governments of his country and of foreign countries have bestowed upon him numerous honors, in conferring on him different orders for his merits in elevating the cultivation of gardens.

The deceased was for long years happily united in marriage with Wilhelmine, who was Miss von Goritz. Her father was a Bavarian and chief member of an official council. Mr. Spæth leaves six daughters, and one son, who is Dr. Phil. Hellmut Ludwig Spæth, to whom he assigned last year the management of his establishment.



FRANZ LUDWIG SPÆTH

The oldest daughter, Mrs. Forstrat Hartmann, whose husband was a commissioner of woods, is already a widow; the second daughter is married to Mr. von Rose in Aurich, member of an official council. Last summer, although suffering, he was nevertheless able to celebrate the wedding of his third daughter, who married Mr. Paul Naglo from Düsseldorf, but the engagement of his fourth daughter was only announced a few months ago with Mr. Peter Louis Ravené, the son of the Privy Councillor and Vice-President of the Chamber of Commerce of Berlin.

In seven years the nursery of Mr. Späth, which is managed by the son of the deceased in the same way, will be able to celebrate its existence of 200 years, and is the only industry in Greater-Berlin which has been kept for so long in the possession of one family.

### THE PARCELS POST AND THE NURSERYMAN

In the last issue of *Trade Notes* we gave some comments on a letter received from one of the northern nurserymen, which has raised considerable needless discussion. It has been needless, simply because the matter was given publicity thru misapprehension of the facts. Like a good many other nurserymen, who have rather small use for the mail in transportation of goods, we paid little attention to the Parcels Post Bill while being framed.

On receipt of the letter in question we gave the matter to the printer without investigation. At the same time we wrote to the Hon. Sydney Anderson, representing the First District in Minnesota in the House of Representatives, and received a letter from him, which explains the whole matter. We print it in full below.

We have also received similar explanations from many eastern nurserymen, who seem to have been better acquainted with the situation than we were. We trust that our error has not resulted in too great a deluge of correspondence falling on Congressional Representatives, and if it has, we beg their pardon.

HOUSE OF REPRESENTATIVES

WASHINGTON, D. C., February 18, 1913.

THE JEWELL NURSERY COMPANY,

Mr. R. D. UNDERWOOD, Secretary,

Lake City, Minnesota.

My dear Mr. Underwood:

I acknowledge receipt of your favor of the 15th instant in which you inquire as to the reason why the parcel post rates were not made applicable to seeds, cuttings, bulbs, roots, scions and plants.

In reply beg to state that prior to January 1, 1913, the postage rate on mail matter of the fourth class (merchandise) was one cent for each ounce or fraction of an ounce. There were some exceptions, however. Congress evidently recognized that the people of the United States would derive a very great benefit from a low rate of postage on plants and seeds—probably greater than on any other class of merchandise—and by an Act approved July 24, 1888, provided a special rate on seeds, bulbs, plants, etc., of one cent for each two ounces or fraction thereof.

Among those who opposed the passage of the Bourne parcel post bill were a large number of nursery and seedsmen.

They took the position that if the Bourne rates were applied to their products it would result in increasing the rate on a great many shipments. For instance, they said that under their special rate they could ship a 12 ounce package anywhere in the United States for six cents and that under the Bourne rates the same six cents would only carry a 12 ounce package one hundred and fifty miles; that under the special rate they could ship a 22 ounce package anywhere in the United States for eleven cents; that the same eleven cents would carry the same 22 ounce package but 300 miles under the Bourne rates; that they could send a 10 pound package from one end of the country to the other for 80 cents but the same 80 cents would carry the same package but one thousand miles under the Bourne rates. To be brief, they insisted that on the average the Bourne rates increased the special rates provided by the Act of July 24, 1888, and further insisted that they be exempted from the parcel post rates and allowed to retain the special rate of two ounces for one cent herein before referred to.

In my judgment they were correct in this insistence for a comparison of the special rate with the present parcel post rate shows that on shipments travelling 50 miles or less the Bourne rates are higher than the special rates on shipments weighing less than 10 ounces. On shipments travelling 150 miles or less the Bourne rates are higher than the special rate on shipments weighing less than 20 ounces. On packages travelling 300 miles or less the Bourne rates are higher on all packages weighing 24 ounces or less. On shipments travelling more than 400 and less than 600 miles the Bourne rates are higher on all packages weighing less than 52 ounces. On packages travelling more than 600 but less than one thousand miles the Bourne rates are higher on all packages weighing 60 ounces or less. On packages travelling more than 1000 miles the Bourne rates are higher in every instance than the special rate.

As a rule it is difficult enough to get for people something that they do want without trying to compel them to take something which they insist they do not want. So the upshot of the entire matter was that plants and seeds were specifically excepted from the parcel post rates and allowed to retain the special rate of one cent for each two ounces or fraction. The only change made so far as these articles are concerned was to raise the weight limit from 4 to 11 pounds.

On the 10th of January I introduced a bill which was designed to eliminate the increases in the present law over the old rate on fourth class mail matter on weights from 4 to 12 ounces and 17 to 24 ounces and to provide ounce rates from 1 to 32 ounces graduated proportionately to the present pound rates. This bill would reduce the rates very materially on smaller weights and shorter distances and would reverse the conditions which now exist in the relation between the special rate referred to and the parcel post rate.

I trust you will find the explanation herein given satisfactory. In any event it is the only explanation which can be given. If I can give you any additional information I shall be very glad to do so.

JEWELL NURSERY CO.,  
 SYDNEY ANDERSON,  
*Wholesale Trade Notes.*

### FOR PEACH TREE BORERS

Hundreds of growers of peach trees in this State are now asking what to do for the Peach-tree borer which is regarded as one of the very worst pests of these trees. A prominent grower in Central Pennsylvania wrote to State Zoologist H. A. Surface, at Harrisburg, asking for information as to the best treatment to prevent future attacks of his trees by the borer. He received a reply instructing him to prepare the lime-sulfur solution by boiling together one pound of lime and two pounds of sulfur with each gallon of water, and apply it as a spray or wash around the base of each tree. The directions were as follows:

"You must apply the lime-sulfur solution at least once per month during the middle of each month of June, July and August, and possibly also September. One treatment is not enough. I have tried this and know for certainty about it from personal experience.

"The way I do is to make the application of lime-sulfur solution strong, the same as for San José scale, but with some sediment present, putting it on with brushes, or with the spray pump with the cap removed from the nozzle. Do this about the middle of June, after having removed the earth from around the trunk of the tree with a hoe, making a little ditch or groove around the base of the tree. Just as soon as this is dry I replace the earth, mounding it up to one-half foot or more. I always make the application one foot or more above the ground. The next time leave the earth mounded, and make it so that the solution will be pretty sure to penetrate the top of this mound. Use plenty. One pint to one quart to a tree is not too much if the tree is large. On small trees one-half pint may be enough. Also, add about one ounce of arsenate of lead for each gallon of this material, which is practically three pounds to fifty gallons."—Prof. H. A. SURFACE in the *Zoological Press Bulletin*.

### SUMMER SCHOOL OF AGRICULTURE

A bulletin has been issued by the Extension Service of the Massachusetts Agricultural College descriptive of the sixth annual Summer School of Agriculture and Country Life, July 1–29. Extended courses will be offered for the benefit of the many people who wish a general knowledge of theoretical and practical agriculture and who can come to the College conveniently during the summer season. Special attention will also be given to the needs of teachers.

The courses to be offered this summer will include practical agriculture and horticulture, elementary sciences, agricultural education, agricultural economics, domestic economy and household science, organized play and recreation, and a group of courses arranged especially for rural social workers.

Amherst is acknowledged to be one of the most delightful towns in New England, noted both for its natural scenic beauties and because it is an educational center. Expenses are very low.

Write for bulletin to Professor W. D. Hurd, Amherst, Mass.

Jackson & Hassman of Dansville, New York, have dissolved partnership, Mr. Jackson continuing the business under his own name.

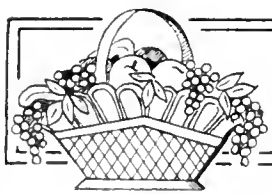
### SCIENTIFIC RESEARCH

For a number of years great efforts have been made in Australia and on the American Continent to bring into operation one of Nature's balancing laws. It has been known for generations that the reason why any particular animal pest has not increased sufficiently to destroy its particular food plant has been that, to use an old aphorism, there has always been one bug to bite another, not always a bigger bug, but, perhaps, a little one; often a little insidious chap has laid low a very much larger insect. Large sums of money have been spent with more or less success in order to introduce into some countries the particular enemies of the Codlin Moth. Scientific men, are, however, now turning their attention to the destruction of animal pests by vegetable growths. Almost everyone who has made a study at all of these questions knows that the lace fly, which is found hanging, or seemingly sitting, on the wall-paper in a dwelling-house, is there because it has been attacked by an exceedingly minute fungus. We have often had in our laboratory, from India and other tropical countries, specimens of coffee, rubber, etc., covered with scale insects, which in almost every case, have been the victims of exceedingly minute fungus. Were it not for this law working in some of our coffee plantations undoubtedly the coffee plant would be entirely blotted out. So long as the atmospheric conditions are dry the scale flourishes and increases unhindered, but immediately the season comes along when the air is full of humidity then the spores of this exceedingly minute fungus spring into life and attack the scale and so hold the balance. Scientific men taking hold of this object lesson of Nature are turning their attention to the artificial use of these vegetable organisms (the minute fungus) in order to clear out the animal (or insect if you like) pests of the grower.

One of the most hopeful moves along this line is reported by M. Leopold le Moult "On the Destruction of Certain Hemiptera (Bugs and Aphides) by Vegetable Parasites," which appeared in the weekly reports of the sittings of L'Academie des Sciences, Paris, Oct. 7, 1912. The aim of the author has been to show that various bugs and aphids can be destroyed in the manner we have outlined. The experiments were carried out at Nièvre (France). Certain bugs affecting cabbages were infected artificially with a culture of *Sporotrichum globuliferum*. Many were destroyed after five days' infection, and all were dead on the 10th day. Perhaps the experiments which will interest fruit growers more than any other were trials made to destroy the woolly aphis (*Schizoneura langiera*), a pest which every apple grower in this country knows only too well, and which is capable of working enormous damage among young trees especially. During Sept., 1911, cultures were made of *Sporotrichum globuliferum* and *Botrytis bassiana*. Two rows of éordon apples, which were separated one from another by 80 yds., were dealt with. The cultures were mixed in water and the trees were sprayed with the spores; one row was sprayed with the *Sporotrichum* and the other with *Botrytis*. At the foot of each tree small pieces of the culture were inserted in the soil, with the idea of destroying root forms. The experiments were carried out on two separate estates, and it is stated that on none of the treated trees did woolly aphis reappear. Should this treat-



ment prove as successful in the future as it seems to have done in these experiments it should not be difficult for growers to receive spray cultures for treating the American blight on their trees. We have often remarked in *The Fruit-Grower* that we have come across plantations in which at some former time woolly aphis had been an awful plague, but which had entirely disappeared without any effort on the part of the owner to deal with the pest. It is just possible that some of these minute fungi may have increased and multiplied in the district until the last of the aphis were gone. The experimenter also treated apple trees with mixed cultures of *Isaria densa*, *Sporotrichum* and *Botrytis*, and claims to have been successful in the experiments. The method adopted was by collecting leaves which bore dead insects which had been destroyed by the fungus and making cultures of them and using the cultures in the way we have described. In August, 1911, another experiment was carried through on 92 cordon apple trees. At the base of each tree a culture of *Isaria densa* was dug in. Spores of *Botrytis bassiana* was sprayed over 46 trees, and spores of *Sporotrichum globuliferum* on the remaining 46. The trees were examined on September 1st, and it was found that the portion of trees which had been sprayed with the *Botrytis* were entirely clear of the aphis, while the lower parts of some of the portion sprayed with the *Sporotrichum* showed some of the white wool, seeming to point to the fact that *Botrytis bassiana* was the more powerful destructor of the two, although the experimenter thinks that there might have been a larger quantity of aphis at the base of the trees sprayed with the *Sporotrichum*. We think there is much of value in the findings of M. le Mout, and we trust that some of our own economic mycologists will go to work along these lines and see if it will not be possible to deal with the American blight in this country in the same way. Should it be found that the effect of spraying with this infected water is as effective as the experiments of the author would indicate, then would be the time for compulsion to be exercised, even at a national charge, to blot out woolly aphis from the orchard of this country.—*The Fruit-Grower, Fruiterer, Florist*.



## Fruit and Plant Notes.

The *Gardener's Chronicle* published a colored plate of a new *Anemone Pulsatilla Rosea* ("Mrs. Van Der Elst") which originated on the Royal Tottenham Nurseries, Deddensvaart, Holland. It is really a first-class hardy perennial of great commercial value. Those who are acquainted with the white flower can readily imagine what a charming flower a pink variety would be, which is the color of this new variety. It is very slow of propagation and the only way to propagate it being by seed. A rather small percentage comes true to color, but it is increasing and the originators hope in the course of a few years will likely get as high as 50 or 60 per cent.

Enclosed find \$1.00 for renewal of THE NATIONAL NURSERYMAN. I always look forward to receiving your journal and do not want to be without it.

Yours truly,

A. F. MILLER.

## A WARNING TO IMPORTERS

THE NATIONAL NURSERYMAN.

Gentlemen:

During the present month I have had some correspondence with Mr. C. L. Marlatt, Chairman of the Federal Horticultural Board, in reference to the entry of certain prohibited Pines from France. Mr. Marlatt says that there have been several lots of prohibited Pines arriving in this country which were not covered by permits, and the importation of which is prohibited by the quarantine rules and regulations, and he asks me to warn the nursery trade generally, through the trade papers that such business cannot be permitted by the Board.

He calls attention particularly to a new amendment to Regulation 5 as pointed below. This provides, in substance, that if it is found that any importer is bringing in prohibited articles that permits for further importation will be refused such importer, and that he will not be allowed to bring in any foreign nursery stock, whether prohibited or not. In other words, it puts him on the bad list and prevents him from handling imported goods.

It seems to me to be advisable that this notice should be brought to the attention of all of your readers.

Yours truly,

Wm. PITKIN,

Chairman.

UNITED STATES DEPARTMENT OF AGRICULTURE

OFFICE OF THE SECRETARY

FEDERAL HORTICULTURAL BOARD

## PLANT QUARANTINE DECISION NO. 2

The Federal Horticultural Board recommends that regulation 5 of the rules and regulations for carrying out the plant quarantine act, published in Circular No. 41, Revised, Office of the Secretary, be amended by the addition of the following:

Permits for the entry of nursery stock or other plants and plant products of any grower or exporter may be refused, and existing permits may be canceled, on proof that such grower or exporter has knowingly shipped into the United States any nursery stock, or other plants and plant products, the importation of which is forbidden by the Secretary of Agriculture under the authority conferred by section 7 of this act.

## A REMEDY FOR SNAILS

John F. Horn, of John F. Horn & Bro. of Allentown, Pa., having been troubled by snails throughout his range, upon advice of a chemist friend obtained a quantity of the Camphor or moth balls used in preserving Winter clothes from moths during the Summer. These balls were placed on the soil about 12 in. apart; for the past four months he has been untroubled by snails.—*Florists' Exchange*.

The time to spray for *Apple Tent Caterpillars*, *Bud Moths* and *Canker Worms* is any time before the blossom buds appear, using two pounds of Arsenate of Lead to fifty gallons of water or Lime-Sulphur solution.



From the U.S.D. of A.

UNITED STATES DEPARTMENT OF AGRICULTURE

OFFICE OF THE SECRETARY

FEDERAL HORTICULTURAL BOARD

PLANT QUARANTINE DECISION NO. 1

The Federal Horticultural Board recommends that Regulation 6 of the Rules and Regulations for carrying out the Plant Quarantine Act, published in Circular No. 41, Revised, Office of the Secretary, be amended by the addition in the first paragraph of a proviso reading as follows:

*Provided, however,* That nursery stock which can be cleaned by disinfection or treatment may be delivered to the importer, consignee, or agent for the proper care and treatment thereof, upon the filing of a voluntary bond, with approved sureties, double to the invoice value of the property (the amount of the bond in no case to be less than \$20 or less than \$1 per plant in case of date palms and date-palm offshoots, conditioned upon the delivery thereof to the collector of customs 40 days from the date of arrival, and provided that the same shall not be removed from the port of entry until a written notice is given to the collector of customs by the inspector of the Department of Agriculture that the nursery stock in question has been properly treated.

Regulation 6, as amended, shall become and be effective on and after April 1, 1913, and the regulation in full shall read as follows:

Regulation 6, Entry of Nursery Stock

(Section 1)

On and after July 1, 1913, entry of nursery stock will not be allowed unless the invoice is accompanied by the original certificate and unless each container bears a copy certificate, issued by a duly authorized official of the country from which it is shipped, stating that the nursery stock covered by these certificates has been thoroughly inspected by him or under his direction and was found, or believed to be, free from injurious plant diseases and insect pests: *Provided,* That for stock to be shipped between October 1 and May 31 such inspection shall be made on or after the 1st of October and for stock shipped during the growing season inspection shall be made at the time of packing: *Providing further,* That on and after July 1, 1913, nursery stock from countries which do not maintain official nursery stock inspection will be admitted into the United States only for experimental purposes and in limited quantities. For such importations a special permit will be required. (See Reg. 5.) Applications for such permits should be addressed, in writing, to the Federal Horticultural Board, specifying the amount and kinds of nursery stock which it is intended to import. Any such shipments will be allowed to enter only through a port which the Secretary of Agriculture will designate in the permit. Such nursery stock shall not be delivered to the importer or consignee until it has been examined by an inspector of the Department of Agriculture and found to be free from plant diseases and insect pests: *Provided, however,* That nursery stock which can be cleaned by disinfection or treatment may be delivered to the importer, consignee, or agent for the proper care and treatment thereof, upon the filing of a voluntary bond, with approved sureties, double to the invoice value of the property (the amount of the bond in no case to be less than \$20 or less than \$1 per plant in case of date palms and date-palm offshoots) conditioned upon the delivery thereof to the collector of customs 40 days from the date of arrival, and provided that the same shall not be removed from the port of entry until a written notice is given to the collector of customs by the inspector of the Department of Agriculture that the nursery stock in question has been properly treated.

Prior to July 1, 1913, it will not be required that the original certificate of inspection accompany the invoice, but each container of imported nursery stock must bear a copy of the certificate of inspection in the form authorized by the responsible inspection official of the country of origin.

Prior to July 1, 1913, nursery stock from countries which maintain no official nursery-stock inspection will be admitted into the United States only through the ports of New York, San Francisco, Seattle, Jacksonville, New Orleans, Honolulu, and San Juan after examination by inspectors of the Department of Agriculture at the port of entry, if found to be free from plant diseases and insect pests.

Collectors of customs will be notified from time to time, through the Secretary of the Treasury, of the countries which maintain official nursery stock inspection.

Entry will not be allowed unless the case, box, or other container or covering is plainly and correctly marked to show the number of permit, the general nature and quantity of the contents, the district or locality and country where grown, the name and address of the exporter, and the name and address of the consignee.

Nursery stock offered for entry without compliance with these regulations will be refused admission. Nursery stock, inspected as provided herein, which is found to be carrying dangerous insects or plant diseases may be treated or destroyed, as circumstances require.

When a package of imported nursery stock includes any prohibited species, the entire package will be refused entry and treated or destroyed as circumstances may require.

All charges for storage, cartage, and labor incident to inspection, other than the services of inspectors, shall be paid by the owner or consignee.

C. L. MARLATT,  
W. A. ORTON,  
PETER BISSET,  
GEO. B. SUDWORTH,  
W. D. HUNTER.

*Federal Horticultural Board.*

Approved:

JAMES WILSON,

*Secretary of Agriculture.*

WASHINGTON, D. C., March 1, 1913.

UNITED STATES DEPARTMENT OF AGRICULTURE

OFFICE OF THE SECRETARY

FEDERAL HORTICULTURAL BOARD

PLANT QUARANTINE DECISION NO. 2

The Federal Horticultural Board recommends that regulation 5 of the rules and regulations for carrying out the plant quarantine act published in Circular No. 41, Revised, Office of the Secretary, be amended by the addition of the following:

Permits for the entry of nursery stock or other plants and plant products of any grower or exporter may be refused, and existing permit, may be canceled, on proof that such grower or exporter has knowingly shipped into the United States any nursery stock, or other plants and plant products, the importation of which is forbidden by the Secretary of Agriculture under the authority conferred by section 7 of this act.

Regulation 5, as amended, shall become and be effective on and after April 15, 1913, and the regulation in full shall read as follows:

Regulation 5. Permits for Entry of Nursery Stock

(Section 1)

On approval by the Secretary of Agriculture of an application for the importation of nursery stock from countries which maintain nursery stock inspection a permit will be issued in triplicate. One copy of the permit will be furnished to the applicant, one copy will be mailed to the collector at the port of entry, and the third filed with the application. Permits will expire on the 30th day of June of the year following the date of issue. They will be in the following form:

This permit expires June 10, 191—.

No. —

UNITED STATES DEPARTMENT OF AGRICULTURE,  
FEDERAL HORTICULTURAL BOARD,  
WASHINGTON, D. C.

PERMIT TO IMPORT NURSERY STOCK

To the Collector of Customs:

SIR: You are hereby authorized, so far as the jurisdiction of the Department of Agriculture is concerned, to permit the importation under "The Plant Quarantine Act, August 20, 1912," of the nursery stock specified in the application of —, dated —, described herein, provided each shipment is accompanied by the certificate of inspection and the shipper's declaration certified by an American consular officer in conformity with the rules and regulations made for the enforcement of the act.

Quantity	General Nature
.....	Fruit trees.
.....	Fruit tree stocks.
.....	Grape vines.
.....	Bush fruits.
.....	Roses.
.....	Rose stocks.
.....	Forest and ornamental deciduous trees.
.....	Ornamental deciduous shrubs.
.....	Coniferous trees other than pines.
.....	Pines—species.
.....	Evergreen trees other than conifers.
.....	Evergreen shrubs other than conifers.

..... Field-grown florists' stock not otherwise listed.  
..... Stocks, cuttings, or seedlings not otherwise listed.  
Name and address of exporter.....  
Name and address of importer.....

Respectfully,  
JAMES WILSON,  
*Secretary of Agriculture.*

Countersigned:  
.....  
*Executive Officer.*

Permits for the entry of nursery stock from countries which do not maintain official nursery-stock inspection will be addressed to the collector of customs in the following form:  
*To the Collector of Customs:*

.....  
You are hereby authorized, so far as the jurisdiction of the Department of Agriculture is concerned, to permit the importation under "The Plant Quarantine Act, August 20, 1912," of the nursery stock specified in the application of ....., dated ....., described herein, only upon receipt of notice in writing from an inspector of the Department of Agriculture that the nursery stock has been inspected by him or under his direction at the port of arrival and was found or believed to be free from injurious plant diseases and insect pests.

(See Regulation 6 for entry of nursery stock from countries having no official system of nursery inspection.)

Permits are not required for nursery stock entering the United States for immediate transportation in bond to foreign countries.

Permits for nursery stock entered for immediate transportation to interior points in bond are required only at point of entry.

Permits for the entry of nursery stock, or other plants and plant products, of any grower or exporter may be refused, and existing permits may be canceled, on proof that such grower or exporter has knowingly shipped into the United States any nursery stock, or other plants and plant products, the importation of which is forbidden by the Secretary of Agriculture under the authority conferred by section 7 of this act.

C. L. MARLATT,  
W. A. ORTON,  
GEO. B. SUDWORTH,  
W. D. HUNTER,  
A. V. STUBENRAUCH,  
*Federal Horticultural Board.*

Approved:  
B. T. GALLOWAY,  
*Acting Secretary of Agriculture.*  
WASHINGTON, D. C., April 4, 1913.

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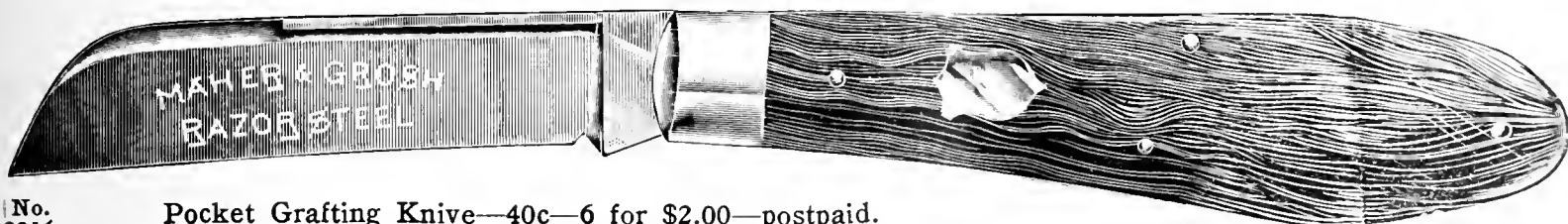
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AZALEAS and other American plants. HARDY CONIFERS, ORNAMENTALS and SHADE TREES, ROSES, FRUIT TREES and FRUIT TREE STOCKS, TRANSPLANTED FOREST TREES, Etc., Etc.

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Pyramids, Standards and Naturals--A Large and Complete Assortment of EVERGREEN and DECIDUOUS TREES, SHRUBS, ROSES, VINES, HERBACEOUS PERENNIALS and BEDDING PLANTS

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that must be sold, and some fine

**Two Year Apple** and  
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And a general line of **ORNAMENTAL TREES** and  
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20,000 Boxwood Bushes, bushy stock, 12 to 18 inches.

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More than 25,000 young plants ready this fall.

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INCORPORATED 1902

THE OFFICIAL ORGAN OF THE AMERICAN ASSOCIATION OF NURSERYMEN

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all the leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

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Orlando Harrison

Harrison's Nurseries will be represented at the coming convention of the National Association of Nurserymen by Messrs. Orlando Harrison and G. Hale Harrison. You will know them by the badge—No. 2. They will be mighty glad to greet you and tell you about our nurseries, our trees, our methods of growing and packing, and show you how Harrison's trees and shrubs will help you to increase your business.

You can give them your order for any kind of nursery stock they grow, and the trees or plants will be shipped whenever you wish. Whether you live in the rugged west or in the sunny south we pack our stock so that it will reach you in prime condition — distance does not



G. Hale Harrison

count. You can order at that time from the list given below, or send in your order *now*, and forget the cares of business on your western trip. We'll see that the order is filled and shipped as it should be.

## SHADE TREES

<b>AMERICAN ELM</b>		<b>HONEY LOCUST</b>	
500	10 to 12 ft., 1½ to 1¾ in.	200	8 to 9 ft.
300	12 to 15 ft., 2 to 2½ in.	200	9 to 10 ft.
<b>AMERICAN LINDEN</b>		<b>NORWAY MAPLES</b>	
100	7 to 8 ft., 1 in.	1000	6 to 7 ft., ¾ in.
200	8 to 9 ft., 1 to 1¼ in.	1500	7 to 8 ft., 1 in.
<b>BLACK LOCUST</b>		5000	8 to 9 ft., 1 to 1¼ in.
200	5 to 6 ft.	5000	9 to 10 ft., 1¼ to 1½ in.
<b>BLACK WALNUTS</b>		2000	10 to 12 ft., 1½ to 1¾ in.
3000	2 to 3 ft.	<b>SILVER MAPLE</b>	
1000	3 to 4 ft.	1500	7 to 8 ft., 1 in.
1000	4 to 5 ft.	5000	8 to 9 ft., 1 to 1¼ in.
2000	5 to 6 ft.	5000	9 to 10 ft., 1¼ to 1½ in.
1200	6 to 7 ft.	10000	10 to 12 ft., 1½ to 1¾ in.
500	7 to 8 ft.	3000	14 to 16 ft., 2 to 2½ in.
<b>CATALPA SPECIOSA</b>		<b>SUGAR MAPLES</b>	
1000	8 to 9 ft., 1 to 1½ in.	1500	7 to 8 ft., 1 in.
2000	9 to 10 ft., 1¼ to 1½ in.	2000	8 to 9 ft., 1 to 1¼ in.
1000	10 to 12 ft., 1½ to 1¾ in.	3000	9 to 10 ft., 1¼ to 1½ in.
		3500	10 to 12 ft., 1½ to 1¾ in.
		1000	12 to 14 ft., 2 to 2½ in.
		<b>TULIP POPLARS</b>	
		500	9 to 10 ft., 1¼ to 1½ in.

## MISCELLANEOUS

<b>ALTHEAS (Assorted)</b>		<b>DEODORA CEDAR</b>	
200	2 to 3 ft.	200	3 to 4 ft.
300	3 to 4 ft.	50	4 to 5 ft.
300	4 to 5 ft.	<b>NORWAY SPRUCE</b>	
<b>AZALEAS</b>		5000	12 to 18 in.
<b>CALIFORNIA PRIVET</b>		7000	18 to 24 in.
15000	18 to 24 in.	4000	2 to 3 ft.
20000	2 to 3 ft.	2000	3 to 4 ft.
10000	3 to 4 ft.	<b>IRISH JUNIPER</b>	
5000	4 to 5 ft.	50	18 to 24 in.
5000	5 to 6 ft.	100	2 to 3 ft.
3000	6 to 7 ft.	150	3 to 4 ft.
<b>RHODODENDRONS (Assorted)</b>		<b>KOSTER BLUE SPRUCE</b>	
300	12 to 18 in.	1000	12 to 18 in.
500	18 to 24 in.	500	18 to 24 in.
<b>ROSES</b>		500	2 to 3 ft.
500	Rosa Rugosa, 3 to 4 ft.	<b>WHITE PINE</b>	
<b>BOXWOOD</b>		300	2 to 3 ft.
5000	8 to 10 in.	300	3 to 4 ft.
<b>COLORADO BLUE SPRUCE</b>		50	4 to 5 ft.
300	18 in.	<b>WHITE SPRUCE</b>	
30	4 ft.	100	12 to 18 in.
		200	18 to 24 in.
		100	2 to 3 ft.

## EVERGREENS

<b>AMERICAN ARBORVITAE</b>		<b>RED CEDAR</b>		<b>PYRAMIDAL ARBORVITAE</b>		<b>STRAWBERRY PLANTS</b>	
1000	3 to 4 ft.	1000	3 to 4 ft.	1000	3 to 4 ft.	Aroma	5,000
100	4 to 5 ft.	200	4 to 5 ft.	1000	4 to 5 ft.	Chipman	10,000
<b>AUSTRIAN PINE</b>		<b>DOUGLAS SPRUCE</b>		800	5 to 6 ft.	Duncan	10,000
60	12 to 18 in.	150	18 to 24 in.	100	6 to 7 ft.	Gandy	100,000
100	18 to 24 in.	150	2 to 3 ft.	<b>SCOTCH PINE</b>		Haverland	50,000
		30	3 to 4 ft.	200	2 to 3 ft.	Klondike	100,000
		<b>ENGLISH YEW</b>		200	3 to 4 ft.	Parson's Beauty	50,000
		90	18 to 24 in.				
		200	2 to 3 ft.				
		200	3 to 4 ft.				

We have left, in good condition, a limited number of trees in 2 year Apple, 2 year Pear and 1 year Peach. Tell us what you want, and at the same time ask for special quotations on Yellow Transparent and York Imperial Apple and Kieffer Pear.

### 500 BUSHELS SEED COWPEAS

Now that the advantages of legumes are getting to be so well known, we think it advisable to offer seed. In our experience the growing of trees is hard on land. This is true to such an extent that we have to rest our land for a couple of years after growing a crop or two of trees on it. We find that nothing will so quickly restore vitality and fertility as Cowpeas. We plant them between seedlings and put them in at every opportunity we get. **WIRE OR WRITE TO US AT ONCE FOR SAMPLES AND PRICES.**

**Harrison's Nurseries**  
J.G. HARRISON & SONS PROPRIETORS  
**BERLIN MARYLAND**

Designed and written by The McFarland Publicity Service, Harrisburg, Pa.

W. F. HUMPHREY, PRINTER, GENEVA, N. Y.



# THE NATIONAL NURSERYMAN



JUNE, 1913

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

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## CHERRY and STD. PEAR

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PINES, BOX BUSH. A general collection  
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ALSO

NORWAY MAPLES, PIN OAKS, IBOTA  
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Large Stock of Apple and Crab, Peach, Plum, Cherry, Currants,  
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 etc., etc., etc., straight stems and good  
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English Manetti, Gooseberries 2 and 3-yr.  
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 all shapes from Belgium, Fall or Spring  
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 other grades; also dyed Raffia in 20 colors.  
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**CHERRY**

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 expert knowledge.

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 be convinced of the extra quality of their

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ST. PEAR

APPLE—1 year, 2 year and 3 year  
 AMERICANA PLUM ON PLUM  
 COMPASS CHERRY ON PLUM

**H.M. Simpson & Sons**

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**PECANS,** Budded or Grafted

**PLUMS** on Plum Roots

**PERSIMMONS,** Japanese

**FIGS,** Celestial, Magnolia, Brown Turkey  
 varieties

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**MULBERRIES,** well branched trees, free  
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**CAMPHOR** Trees

**CONIFERS** and Evergreen Trees

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Prices are Right

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Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses,  
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### OUR SPECIALTIES ARE

Roses, H. P. Moss, Ramblers, Climbers, etc., Peaches, Pears, Plums, Cherries,  
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No Trouble to Price your List of Wants. 59 Years 1200 Acres 44 Greenhouses

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# TOP NOTCH Barberry Thunbergii Seedlings

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Place your order early, sure to get the right stock. You want CALIFORNIA PRIVET too. We have over a million in all grades. PEACH TREES by the car load. Please let us quote prices.

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APPLE QUINCE PEAR CHERRY  
PEACH PLUM

A Fine Block of  
Own Root Roses

ORNAMENTAL TREES SHRUBS  
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EVERGREENS PEONIES PHLOX  
PYRAMIDAL and STANDARD  
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists  
and carload lots.

**W. & T. SMITH COMPANY**

GENEVA, N. Y.

63 Years

700 Acres

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We never call a tree or plant a "specimen" until it really has earned the title. Our evergreens are transplanted, sheared and root-pruned, each one getting just the proper attention to make it a really handsome and serviceable specimen. It costs more to produce such, but it's worth it—to us, to you and to your customers.

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Tell us what you need, quantity, etc., and we will quote lowest price possible. Write early and get the best selections from our stock.

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AUGUSTA, GEORGIA

Established 1856. Over 450 acres in Nursery.

CONIFERS  
BROAD-LEAVED  
EVERGREENS  
DECIDUOUS  
SHRUBS  
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PEACHES  
OTHER FRUITS



Biota Japonica Filiformis.



## The Best Tree Digger on Earth



Used and Recommended by Leading Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

**Stark Bros. Nursery & Orchards Co.**  
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If you cannot come, do the next best—write for our Wholesale Catalog, free to you.

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*Evergreen Specialists*

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**Largest Nurseries  
in Europe**

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FOUNDED 1720

**HARDY TREES  
AND SHRUBS**

1. Our nurseries lie in a colder climate than the French, Dutch and English nurseries—
2. We grow all the stock we sell—
3. Moderate prices.  
Catalogs free—
4. When in Europe come and see our nurseries—

ESTABLISHED 1866

**T. S. Hubbard Co.**

FREDONIA, N. Y.

THE LONGEST ESTABLISHED AND BEST KNOWN GROWERS OF

**GRAPE VINES**

And the Largest Stock in the United States

Agawam, Diamond, Niagara, Brighton, Eaton, Pocklington, Campbell's Early, Green Mountain, Salem, Concord, Lutie, Woodruff Red, Delaware, Moore's Early, Worden and all other old and new varieties which we think worthy of general cultivation

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Black Champion, Lee's Prolific, Versailles, Black Naples, North Star, Victoria, Cherry, Pomona, White Dutch, Fay's Prolific, Red Dutch, White Grape, President Wilder and many other well-known varieties.

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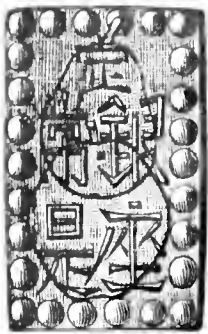
A fine stock of leading varieties. One and two years.

**Blackberries**

The largest and best stock of root cutting plants in this country. All the best varieties. Snyder in great quantity. Our blackberry plants are as well furnished with fibrous roots as our well-known grape vines.

Send for our Price List and new Illustrated Descriptive Catalogue.

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Huntsville  
Wholesale Nurseries

Huntsville, Ala.

JESSIE S. MOSS, Prop.

We offer for Spring of 1913  
in large quantities as usual:

### SPECIALTIES

**APPLES**—Commercial varieties, one and two year, in large supply. As fine in quality as ever grown.

**PEARS**—Kieffers, one and two years old. A much smaller crop than heretofore.

**CHERRIES**—On Mazzard. Two year, Bing, Lambert, Napoleon, Black Tartarian.

**CHERRIES**—On Mahaleb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.

**PEACHES**—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.

**ROSES**—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.

**PRIVET**—Amoor River (South). Retains its foliage longer and holds its color better than California Privet.

**PECAN SEEDLINGS**—Huntsville grown from selected nuts collected along the Gulf Coast. Thin shell.

See Price List for Particulars.

Address, HUNTSVILLE WHOLESALE NURSERIES  
HUNTSVILLE, ALA.

## Budding Time!

**RAFFIA.** How are you fixed? We can sell you from one to fifty bales and ship same day. We call it the "J&P Preferred" brand—clean, white, wide, long strands,—just what you want for budding; there's too much waste in short Raffia.

**BUDDING KNIVES.** Plenty on hand? Always a good plan to have a few extra ones—the boys will lose 'em, you know.

**FERTILIZER SOWER.** We sell a good one—pays for itself over again every summer—saves material, time and labor. Send for Price List of useful tools and things needed around the nursery.

**Jackson & Perkins Co.**  
NEWARK, NEW YORK

JUNE 1913

### BOBBINK & ATKINS

World's Choicest Nursery and Greenhouse Products

EVERGREENS and CONIFERS,  
in several hundred  
kinds and varieties

ROSES, in all kinds  
and varieties

RHODODENDRONS, Hardy,  
ENGLISH HYBRIDS,  
Maximum and Catawbiense

BOXWOOD, in all shapes,  
forms and sizes

HARDY AZALEAS, in all  
colors and varieties

HEDGE PLANTS, in all  
popular kinds

FLOWERING SHRUBS, in  
bush and standard forms  
in hundreds of kinds  
and varieties

SHADE TREES, in hundreds  
of useful and attractive  
varieties

MAGNOLIAS and other  
FLOWERING TREES

WEeping and STANDARD  
TREES, in many varieties

JAPANESE MAPLES, in all  
varieties and colors

HARDY TRAILING VINES  
and CLIMBERS

HARDY VINES and CLIMBERS  
in pots

SPRING and SUMMER  
FLOWERING BULBS, ROOTS  
and PLANTS

PALMS and BAY TREES by  
the thousands

FRUIT TREES,  
home-grown, imported,  
DWARF and TRAINED

SMALL FRUITS, in all  
kinds and varieties

NUT TREES, profitable  
kinds

OLD-FASHIONED, Hardy  
FLOWERING PLANTS, in  
thousands of kinds and  
varieties

PAEONIAS, IRIS, PHLOX  
FERNs,  
and HARDY GRASSES

KITCHEN  
HERBS and ROOTS

RUTHERFORD PARK LAWN  
GRASS SEED

AUTUMN BULBS, Dutch,  
French and Japanese kinds

Interior and Exterior  
DECORATIVE PLANTS, in  
a large variety

PLANT TUBS, in all shapes and  
sizes. Ask for special list

VISITORS to our nurseries  
are always welcome

SEND IN YOUR LISTS FOR  
QUOTATIONS

**Nurserymen, Florists and Planters**  
RUTHERFORD, N. J.

## BRIDGEPORT NURSERIES

OFFER A GENERAL ASSORTMENT  
OF NURSERY STOCK

Apple, Catalpa Speciosa Seedlings  
Shade and Ornamental Trees

IN LARGE QUANTITY

WRITE FOR PRICES

**C. M. HOBBS & SONS**  
BRIDGEPORT, IND.

## SEEDLING EVERGREENS

BY THE MILLIONS

Arbor Vitae	Jack Pine
Austrian Pine	Norway Spruce
Black Hill Spruce	Pinus Ponderosa
Colo. Blue Spruce	Pitch Pine
Concolor	Red Spruce
Douglas Spruce	Scotch Pine
Engelmanii Spruce	White Pine
European Larch	White Spruce

All sizes. Ask for prices.

SPECIAL QUOTATIONS ON LARGE ORDERS

Also the following **APPLES** in 1-2", 5-8" and 11-16" sizes at special prices:

Ben Davis, Duchess, Florence, Gano, Hibernial, Iowa Beauty, N. W. Greening, Okabena, Patten's Greening, Peerless, Peter, Pewaukee, Scott's Winter, Soulard, Strawberry Crab, Transcendent, University, Virginia, Wealthy, Whitney and Wolf River.

## SHERMAN NURSERY COMPANY

CHARLES CITY, IOWA

## Oriental Planes All Sizes From 1 $\frac{1}{4}$ to 2 $\frac{1}{2}$ inch Caliper

Double Flowering Peaches  
Double Flowering Japan  
Cherries, Weeping Japan  
Cherries, Flowering Apples  
Asparagus, strong 2 years  
Large and complete assortment of Flowering Shrubs

## Hoopes, Bro. & Thomas Co.

MAPLE AVENUE NURSERIES  
WEST CHESTER, PA.

PHILADELPHIA

OFFICE:

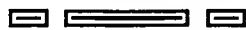
222-3-4-5 Stephen Girard Bldg.,  
21 So. Twelfth Street

64TH YEAR

Baltimore Nurseries

## FRANKLIN DAVIS NURSERY COMPANY

Baltimore, Md.



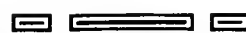
We offer for Fall 1913 and Spring 1914:  
HIGH GRADE STOCK.

General Line:

PEACH, APPLE, PEAR, CHERRY, PLUM, CALIFORNIA PRIVET in 1 and 2 year fine stock.

ORIENTAL PLANES, NORWAY MAPLES, AMERICAN ELMS, SILVER MAPLES, HORSE CHESTNUTS, ETC.

Will make prices right on Peach and Privet in carload lots for early orders.



**SEND US YOUR LIST  
OF WANTS**

Have you seen and examined the quality and finish of our

## Rawhide Brand of Shipping Tags and Tree Labels

printed or plain, strung or wired?



This stock is especially adapted to the most severe usage, being thoroughly waterproof & weatherproof. "Once used, always used."

Send for samples and prices. Our reference are the largest nursery men in the United States.

## The Denney Tag Co.

WEST CHESTER, PENNSYLVANIA



35TH YEAR  
**Pan Handle Nurseries**

WE OFFER A COMPLETE ASSORTMENT OF NURSERY STOCK CONSISTING OF

Apple	Poplar Carolina	Ampelopsis
Pear	Poplar Volga	Roses
Plum	Elm American	Evergreens
Cherry	Sycamores	California Privet
Peach	Mountain Ash	Buxus
Grape	Althea	Weeping Trees
Currant	Hydrangea	Catalpa Seedlings
Gooseberry	Barberries	Black Locust "
Small Fruits	Syringaeas	Fruit Tree "
Maple Norway	Clematis	Catalpa Speciosa Seed.
Maple Schwedlers	Honey Suckle	Etc., Etc., Etc.
Maple Silver	Wistaria	

Our stock is well grown and graded. Prices are such that it will pay to investigate. Come and see us or write.

**J. K. HENBY & SON**  
GREENFIELD, IND.

**Currants. Apple Trees  
Ornamental Trees  
Ornamental Shrubs**

No better stock or finer assortment in the country.

*Prices are right*

Our Spring Trade List can be had for the asking.

**ARTHUR BRYANT & SON**

PRINCETON, ILLINOIS

**WOOD LABELS**

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

**Dayton Fruit Tree Label Co.**

South Canal St., Dayton, Ohio

**Ornamental Trees, Shrubs,  
Evergreens, Vines, Etc.**

HIGH  
GRADE



LARGE  
VARIETY

Correspondence solicited. Price list upon request.

**W. B. WHITTIER & CO.**

South Framingham, Mass.

WE OFFER FOR SPRING 1913:

**Norway Maple Silver Maple  
and Carolina Poplar**

IN CAR LOTS ALL SIZES  
GET OUR PRICES

The Greenbrier Nursery Co., Inc.

GREENBRIER, TENNESSEE

**SCARFF'S PLANTS**  
equal to any  
on the market

Small Fruit Plants our specialty for 25 years. **100,000 Transplanted Raspberry**, Blackberry and Dewberry plants, fine for critical retail trade.

Currant, Gooseberries, Grapes, Horseradish, Asparagus, Rhubarb, etc. Hardwood cuttings and layers in large quantities. See our wholesale list before placing your order.

**W. N. SCARFF**

NEW CARLISLE, OHIO

**HORTICULTURE**

A Magazine of Trade News and Cultural Information for the NURSEYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

*Published Weekly*

SUBSCRIPTION \$1.00 PER YEAR

**HORTICULTURE PUBLISHING CO.**

11 HAMILTON PLACE, BOSTON, MASS.



**400,000 Small Fruit Plants** in storage for early spring trade, 1913. Blackberry root-cutting and sucker plants; Red, Purple and Black Raspberry; Downing Gooseberry, one year, No. 1; Dewberry; Asparagus two and three year roots; Rhubarb one, two and three year whole roots and divided. Trade List ready Feb. 1st. Let me quote you on your list of wants.

P. D. BERRY, Dayton, Ohio

When writing to Advertisers please mention The National Nurseryman

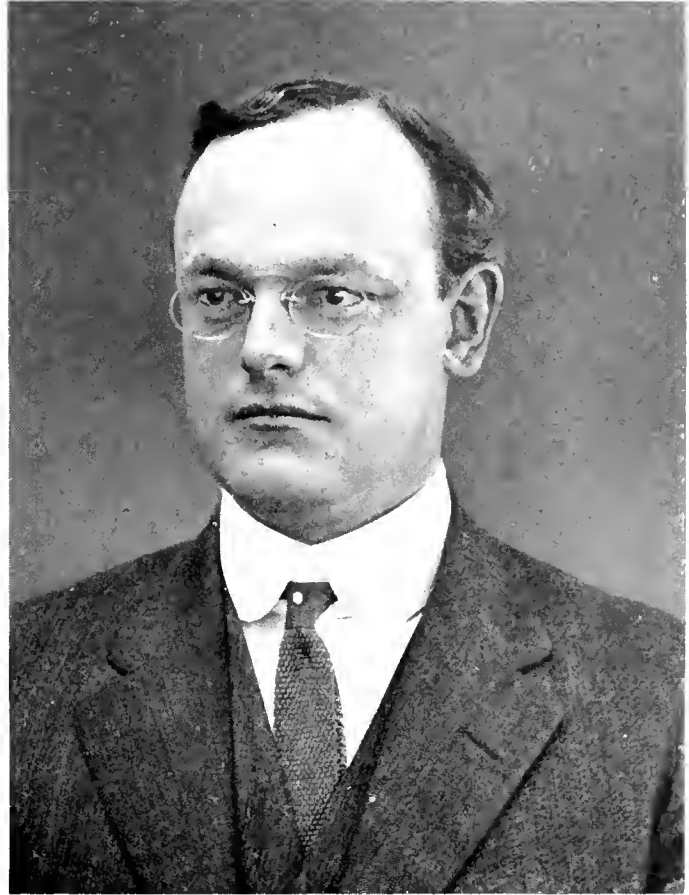
# The McFarland Organizations

AT THE PORTLAND CONVENTION

JUNE 17, 18, 19, 20, 1913



J. HORACE McFARLAND



CARL W. DAVIS

## Badges Nos. 7 and 8



J. Horace McFarland Co.

Catalogues, Booklets, Folders

The  
McFarland Publicity Service

Complete Service Campaigns

HARRISBURG, PENNSYLVANIA

# "THE RULE OF THREE"

## Advertising + Catalogue + Follow-Up = SALES

A day or two ago a seedsman told one of our salesmen, "You folks beat all the others in catalogue-making." We have heard it a good many times—but the man who has never had a McFarland catalogue doesn't know what it means. The McFarland service means INCREASED SALES. Here are three reasons why the products of the McFarland Organizations are business bringers for Nurserymen and Seedsmen who avail themselves of our service:

1. COPY.—Our men have had actual experience in selling nursery stock and seeds. They can make catalogues and advertising copy that will sell the goods—a get-away from the old dead descriptive list. You furnish the list of varieties, and we will supply the selling story—putting into the copy THE "PULL" THAT WILL SELL YOUR GOODS.
2. ILLUSTRATIONS.—Our designers and artists have been trained to produce the most effective pictures of trees and plants. We have thousands of photographs and engravings for illustrating catalogues and advertisements. A foreign nurseryman says, "YOUR COLOR-PLATES ARE THE BEST IN THE WORLD."
3. PRINTING.—There is a mark of excellence in McFarland catalogues not found in others. They are produced by careful workmen, under pleasant conditions, with an ambition to make something worth while; but THE MAIN POINT IS NEVER FORGOTTEN—the selling of the goods.

One of our clients says, "Our sales show thirty per cent increase over last year," and the records of another show double the number of orders this season as compared with 1912. The McFarland Organizations can help you increase your business. We plan the campaign, write the copy, plate the advertisements, prepare the catalogues, booklets and follow-up with one object in view—SELLING THE GOODS. Let us tell you about our methods and policies, why our service is "different," and how we help to build business for our clients.

We should like to handle your complete campaign, but we are ready to make your catalogue only, and give to its construction THOUGHT, IDEAS and CARE—we do not insist on the complete order.

## THE MCFARLAND ORGANIZATIONS

J. Horace McFarland Company

Catalogues, Booklets, Folders

The McFarland Publicity Service

Complete Service Campaigns

HARRISBURG, PENNSYLVANIA



# Putting Stark City "On the Map"

## Progress Made in the Past Twelve Months by the William P. Stark Nurseries

To realize an ambition is gratifying, but to have the results exceed one's anticipations two-fold is nothing short of supreme satisfaction.

This briefly is the story of this year's work at Stark City. We did over two and one-half times the business we had set as an estimate for the season.

A great deal of this was due, I believe, to the warm interest and friendly efforts shown by my countless friends among nurserymen, orchardists and fruit growers in general the country over. And I want to take this opportunity to thank my many friends and counselors whose encouragement has contributed so largely toward aiding me in maintaining the high standard I have endeavored to follow in nursery work.

### OUR NEW LOCATION ON TOP OF THE OZARKS

At Stark City, Missouri, we are on top of the Ozark plateau, with an altitude of 1,200 feet. At this particular spot we are fortunate in having in one body several large tracts of rich soil on a limestone foundation.

This soil and the splendid mountain climate are especially favorable for growing a most varied and complete assortment of nursery stock. Our famous Stark-Ozark 1-year-old apple and peach trees thrive amazingly; the roots form long, strong and vigorous, giving us unusually good planting trees.

In the march of progress the old is always being displaced by the new. And we have dropped a great many varieties because we believe they are no longer profitable for the



William P. Stark

orchard-grower. We feature only what we consider the cream of those fruits that will sell at top market prices.

We are also giving considerable attention to ornamentals, roses and peonies. On all standard varieties of fruits and ornamentals we will be glad to quote prices to our friends in the trade.

### EFFICIENT PACKING HOUSES

Our brick packing houses, I believe, are

unparalleled anywhere. The buildings cover over an acre, and we have excellent facilities for handling and caring for stock. The height of the main buildings is 16 feet at the eaves, giving an unusual storage capacity. As the houses are of brick, and well arranged for ventilation, we are able to maintain a uniform temperature, not high enough to start sap action, not too dry, not too cold.

Being located on three railroads, routing and delivery are well taken care of. My men call me an extremist on the subject of packing and boxing, but I am a great believer in delivering trees in perfect condition.

### OUR PLANS FOR THE FUTURE

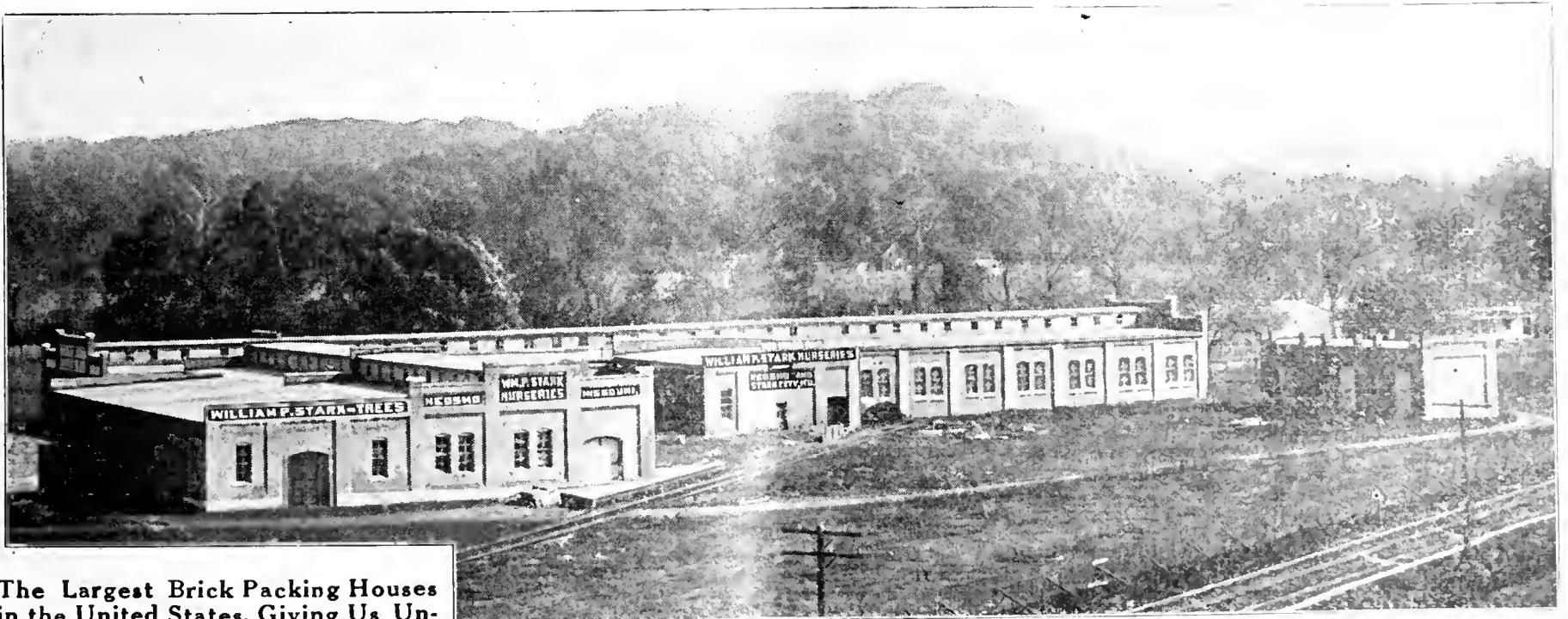
With the splendid headway we have established and the exceedingly favorable conditions under which we are working, we look for big things in the future.

We have several million trees in process of manufacture here now, which will be ready for fall and spring planting. We are able to grow better trees and give better service than ever before. Our organization is working smoothly and with precision, and from present indications will have all it can handle the coming season.

I shall be glad to have you pay me a visit. I believe I can show you some things that will interest you and you will find a cordial welcome any time you come.

WILLIAM P. STARK.

## William P. Stark Nurseries, Stark City, Mo.



The Largest Brick Packing Houses  
in the United States, Giving Us Un-  
equalled Shipping Facilities.

# Guarding Against the Elements

In planting Apple Seedlings we have found it necessary to cover the seedlings with a ridge 3 to 4 inches above the seed. This prevents the seed from drying out until it has had time to sprout and also prevents the ground from packing in case of excessive rains. The seed cannot come through the four or five inches of ground—so we run our smoothers over the ridges—just as the seed begins to sprout—which levels the ground and leaves the sprouted seed within half an inch of the surface. If smoothed at exactly the right time the rows will



show across the field on the following day. By using these ridges we guard against excessive rains and drouths and get rid of the first crop of weeds.

Our smoothers are made of lister points which throw the soil both ways. The depth is regulated by using a prong on the end of the cultivator frame that carries the lister. The “rakers” follow these “smoothers” and clear off any little obstacles that may hinder the proper growth of the seedling. In the first stages of its growth the Apple Seedling is watched and tended with the utmost care. No expense is spared to give it the “right start in life.”

## F. W. WATSON & COMPANY

*Apple and Pear Seedling Specialists*

**Topeka, Kansas**



# The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

Vol. XXI.

ROCHESTER, N. Y., JUNE, 1913

No. 6

## OREGON

By F. H. STANTON, Hood River, Oregon



PORTLAND, OREGON AND MOUNT HOOD

Oregon will interest every nurseryman, his wife and the children. The state is of great historical interest and is an important section for fruit growing.

The Hudson Bay Company of England early in the last century located a number of trading posts in the Northwest, for the purpose of controlling the fur industry. In 1842, through the heroic efforts of Jos. Meek and a few other enthusiastic citizens of the United States, assembled at a

mass meeting in this territory, which was called for the purpose of deciding whether the territory should belong to England or the United States. By a small majority it was decided in favor of the United States.

The State of Oregon with its early settlers is responsible for the great country then known as the Oregon country and now known as the states of Oregon, Washington, Idaho, and Montana.



Oregon is celebrated for its splendid climate, which is temperate the year around, free from all sorts of disturbances, such as hurricanes, cyclones, earthquakes, floods, etc. There is hardly a section of it, excepting the mountains, where a man cannot sleep out of doors during the entire year, nor on the other hand is the climate ever so warm as to become oppressive. Such a thing as death from heat is almost unknown.

The salmon canneries are extensive and this industry is one of the most prominent.

Oregon produces fine fruit, that of the home orchards of the early settlers, more than half a century ago, was consumed locally and supplied the coast trade as far south as California. During the last ten years this industry has rapidly grown, the present output totalling several thousand cars annually; fruit is now shipped all over the world.



PORTLAND STREET SCENE

Oregon's industries and resources are almost unlimited. It is celebrated for its wonderful output of lumber, the standing timber probably being unequaled by any state in the union at the present time. Wheat and grain are grown in large areas very successfully. The climate is such that grass grows nearly the year around in most parts of the state, and for this reason, it is becoming celebrated for stock, immense areas being devoted to raising cattle, horses, sheep, hogs, etc. Dairying is becoming another of the prominent industries of the state, and Oregon cheese is celebrated in every part of the world by connoisseurs.

While apples are grown extensively, the state is justly celebrated also for pears, peaches, grapes, plums, and all small fruits, such as strawberries, raspberries, loganberries, etc. Very few sections in the United States are successful in growing the English Walnut, but certain parts of Oregon are especially adapted to it, and the number of acres planted to this nut is rapidly increasing.

To Oregon belongs the fame of originating the two best cherries grown anywhere in the world—the Lambert, which was named after Mr. Lambert, a pioneer who was the originator, and the Bing, named after a Chinaman who was

foreman of an orchard where this cherry originated. Both of these cherries are about as large as a quarter of a dollar, of splendid flavor, very dark in color, being a rich mahogany. They are solid in flesh and have been shipped in open express across the continent, without ice.

The Hood River strawberries have been supplied to all of the principal hotels in cities west of Chicago in first-class condition. These berries are famous for their flavor and keeping qualities. They are the best strawberries grown in the Northwest. Hood River is entitled to credit as being the originating point of the famous Hood River strawberry which was originally called the Clark's Seedling, after the man who discovered it.

Nearly every nurseryman also knows that Oregon has been for many years celebrated for its beautiful apples with their fine keeping qualities. Especially is this true of the Yellow Newtown and the Spitzenburg, which have realized higher prices during the last ten years than have been obtained for any other commercial apple, grown anywhere in the United States. The Comice, Anjou and Bartlett pears are grown extensively in the state of Oregon, and the highest prices are obtained for these varieties in the eastern and European markets.

The scenery of Oregon is beyond description. The Columbia River flows along the northern boundary.

Mt. Hood, which is 11,025 feet high, located in Hood River county, is eternally covered with snow and is one of the grandest snow capped mountains in the world. Travellers admit the natural scenery of Oregon surpasses anything seen in Europe.

Nurserymen, their wives and friends who expect to attend the meeting of the National Association of Nurserymen at Portland in June, can arrange their trip so as to visit Yellowstone Park, enroute, which has a world-wide reputation; go through the Yakima and Wenatchee valleys, the two largest fruit growing sections; stop off at Tacoma and Seattle; see the Puget Sound; catch a glimpse of Mt. Ranier, the highest snow capped mountain in the state of Washington; and then travel on to Portland, which is famous as one of the most magnificent cities of the great west. From there a side trip could be made to Hood River, which is justly celebrated and famous for its Spitzenburgs, Yellow

Newtown apples and strawberries. This trip could be made by boat giving an opportunity to view the wonderful scenery along both banks of the Columbia river. The trip can be arranged so as to return from Portland by way of the Willamette and Rogue River valleys, excellent fruit sections, stopping off in the Golden Gate city of San Francisco; afterwards visiting Los Angeles and the Orange country; returning home by way of the Grand Cañon, one of the greatest wonders of the world. Those who have

never made this trip nor viewed the wonderful scenery of the Northwest country and California, cannot realize what magnificent sights are in store. It is a trip of a life time and no nurseryman should fail to make it, or fail to bring his wife.

Oregonians are noted for their generosity and hospitality and it goes without saying that everyone will not only have a good time but a very interesting trip.

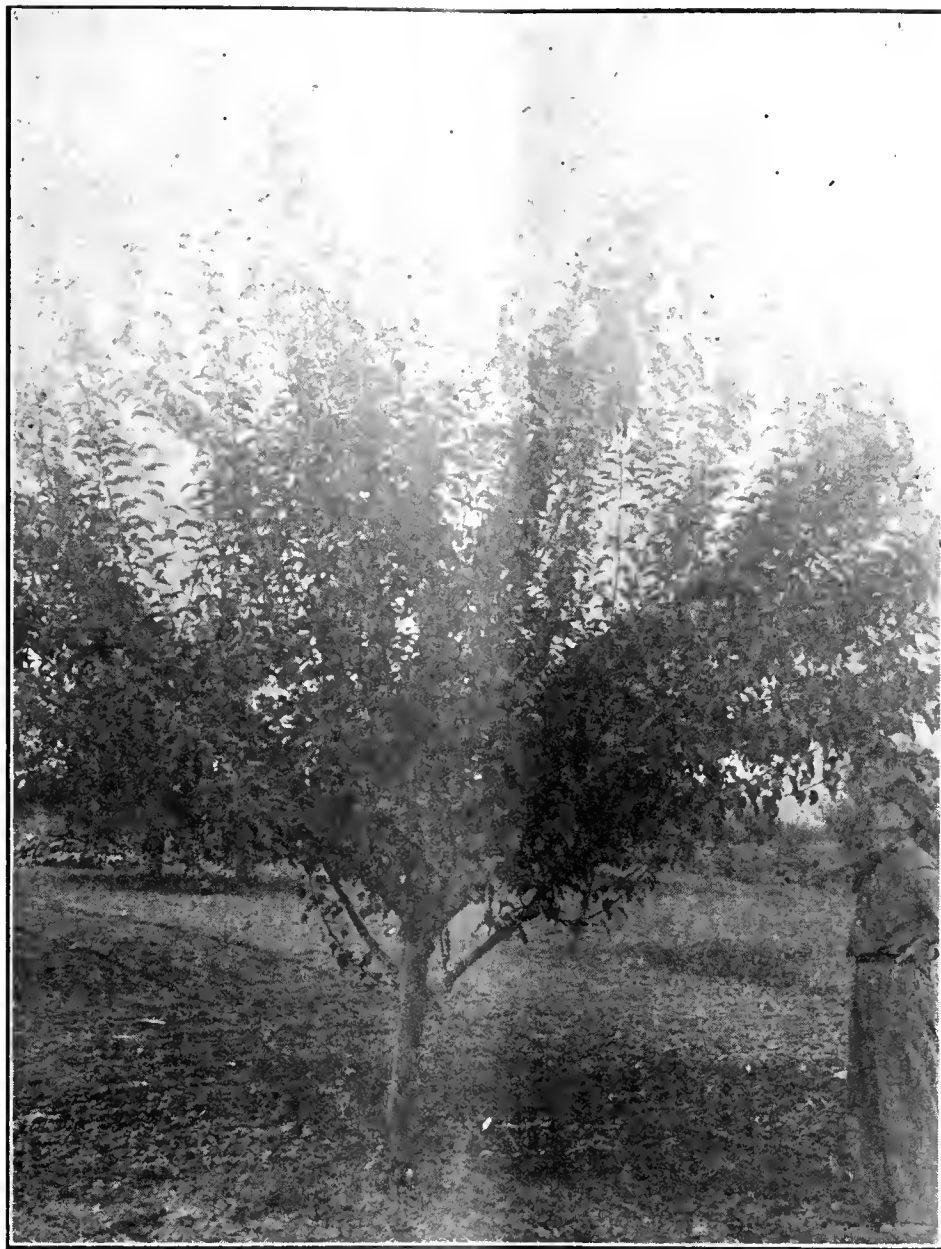
The orchardists and nurserymen of the state of Oregon obtained their first trees from the middle west and eastern nurseries, and, therefore, Oregon feels that it is obligated to all eastern and middle west members of the National Association of Nurserymen. Oregon, as well as Washington, Montana, and Idaho have for many years been large purchasers from the middle west and eastern nurseries; therefore, the nurserymen of the Pacific Coast are

anxious to have the members of the National Nurserymen's Association make this trip in order that they may comprehend fully that the Northwest is one of the most wonderful fruit countries of the world.

#### J. W. HILL

The readers of the NATIONAL NURSERYMAN will be pleased to know that Mr. J. W. Hill of the Des Moines Nursery Co., Des Moines, Iowa, who has been taking a much needed rest, has returned to his work and is feeling "fit" again.

THE NATIONAL NURSERYMAN extends its thanks to its friends on the Pacific Coast to have so liberally supplied many of the illustrations and description text of the Northwest which appears in this issue.



Four year old Jonathan Apple in Orchard of Frank Williams, Toppenish, Washington





Drainage Canal, Yakima Indian Reservation; 44 miles of this canal takes care of surplus water from 120,000 acres under the Wapato project.

## THE YAKIMA INDIAN RESERVATION

By GEO. M. ALLEN, Toppenish, Wash.

The Yakima Indian Reservation is located in the south central portion of the state of Washington and almost midway between the large cities of Spokane and Seattle. When contemplated railway plans are completed, it will enjoy direct access by rail to the city of Portland, the growing metropolis of Oregon. The reservation includes more than 1,000,000 acres of land within its border, of which approximately 120,000 of highly fertile agricultural lands constitute the

Wapato unit of the general Yakima irrigation project now in process of development by the United States Reclamation Service.

This particular section of the reservation is traversed by the main line of the Northern Pacific railway, as also by two branches of the same system. The transportation facilities thus provided bring the district within easy reach of the coast markets and also those of the interior.



Budding Crew in Peach Block, July, Washington Nursery Co.





French Pear Seedlings, Washington Nursery Co., September

The lands for the most part are still held in Indian ownership, although what are known as "heirship lands," that is, lands belonging to heirs of deceased natives, are being sold by the government on appraisal, and in this way some 15,000 acres have already passed into the possession of white farmers. These lands together with some 35,000 acres of the Indian allotments that are being operated under leaseholds by white men make up what may be termed the producing portion of the reservation.

All farming is done under irrigation, the Indian Service branch of the Federal Interior Department having constructed a system of ditches capable of supplying all the water required for the above acreage.

The soil which may be described as a mixture of volcanic ash and alluvial deposits, is extremely fertile, lends itself

readily to tillage, and produces abundantly of almost all products of the temperate zone and of many which might be classed as semi-tropical.

Thus far in its development the reservation has been given over chiefly to the growing of alfalfa hay, of which approximately 20,000 tons are produced each year. On a smaller scale, potatoes, onions, melons, and similar products are marketed. Dairying and general stock raising are rapidly attaining an important position in the industries of the district.

Some years ago it was discovered that the reservation lands are particularly well adapted to the growing of choice nursery stock. The combination of a rich, deep soil, long growing period, with an abundant moisture supply always under control, made a strong appeal to Mr. A. W. McDonald,



Apple Buds, Washington Nursery Co., July 22d

a pioneer in the development of the nursery business in the west, and in the year 1903 he located on the reservation for the purpose of giving a practical test to his belief that the conditions were suitable to the production of first-class nursery stock. Out of his experiments and from a very modest beginning there has grown up in the city of Toppenish, the Washington Nursery Company, the largest institution of its kind in the state of Washington and the second largest on the coast. Mr. McDonald is still the president and manager of the growing department of the company; Mr. F. A. Wiggins, the vice-president, handles the sales end of the business, and Mr. C. J. Atwood, the secretary-treasurer, heads the big office force which looks after the manifold details of the big business which the company annually transacts.

Toppenish where the head offices are located is a growing little city, typically western, and having a population of approximately 2,500. In addition to excellent transportation facilities, Toppenish has the other modern utilities usually found in enterprising and prosperous communities, including electric lighting service, municipal water plant, paved business streets, excellent grade and high schools, numerous churches, with a business district built entirely of brick and concrete.

It is the trade metropolis and chief distributing center for the reservation and its people look forward to the completion of the big government irrigation project as the starting point of a new era of growth that will double and probably quadruple the present population within a very brief period.



S.S. BAILEY GATZERT IN CASCADE RAPIDS, COLUMBIA RIVER

## THE ROUTE OF THE "NURSERYMEN'S SPECIAL" THROUGH WASHINGTON AND OREGON

By F. A. WIGGINS, Toppenish, Wash.

The great State of Washington with its diversity of altitude and climate, its two mountain ranges, the Cascades and the Coast range, its immense inland seas, Puget Sound and other waters of the West, and its lakes and rivers, which latter include the mighty Columbia and its tributaries, contains within its borders such apparently unlimited wealth of agriculture and mine and forest and fisheries that to describe each in detail would burden the reader.

Its mountains are yet covered with virgin forests, although for over fifty years man has hewn at them. Its mountain peaks are covered with perpetual snow which feed the rivers throughout the long warm summers, and which latter float the logs to the lumber camps or irrigate the lands of the vast Inland Empire east of the Cascades and the rapids of which furnish power for the multiplied industries of the rapidly expanding population.

Nature has indeed been kind to this great state and its people. In fertile soil, in diversified climate, never severe, in wonderful scenery of mountain, river, sea and plain; in fact, in all that goes to make for happy contented homes and abundant prosperity, Washington seems to lack nothing.

The "American Nurserymen's Special" enters the state from the east and makes its first stop at Spokane, the great radial center of the vast Inland Empire made up of Northern Idaho and Eastern Washington. Here lumber, and mine, and cement and fruit and dairy and grain rival each other in importance as wealth producers, all supplemented and made more or less possible by the enormous power development of the Spokane and other streams which have covered much of this territory with a network of power wires and interurban lines.

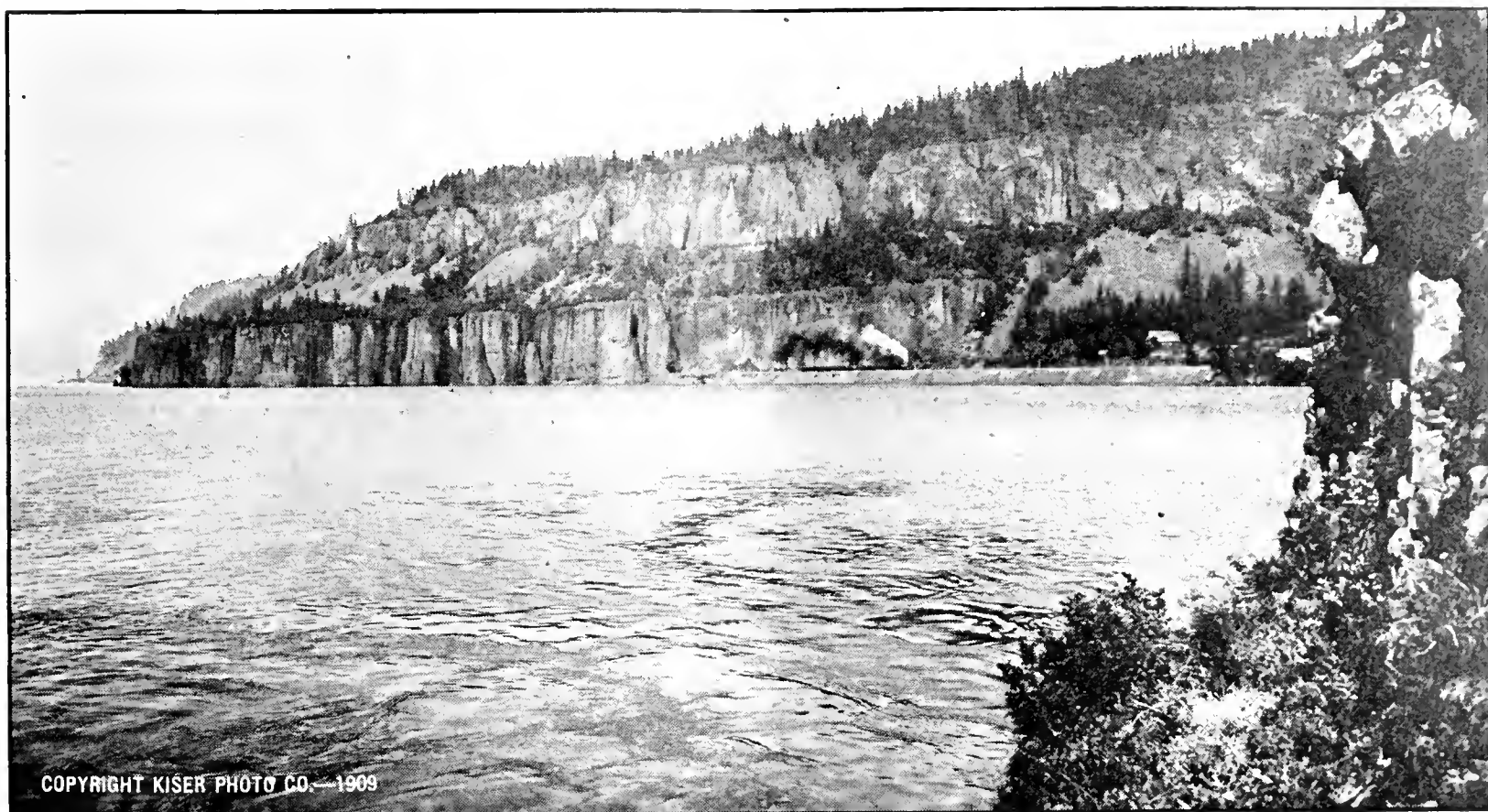


Spokane's population of 115,000 is busy, progressive, and thrifty. No need to dwell on her modern business blocks, beautiful homes and wonderful falls.

From Spokane the route is through a portion of the great Eastern Washington wheat belt, across a bit of the arid section of rich volcanic ash east of the Columbia, through Pasco, the rail and water center of Central Washington, near the junction of the Snake and Columbia, and finally enters the famous Yakima Valley at Kennewick, which is the Junction of the Yakima and Columbia rivers.

Kennewick has the distinction of producing the earliest strawberries of any section of the Northwest, besides which she also specializes on early and late deciduous fruits of all varieties, as well as domestic and foreign grapes.

city of fifteen thousand inhabitants. Leaving Yakima the route lies through Ellensburg, in the center of a rich agricultural and dairy section of the upper Yakima Valley, and on through the lumber and mining towns of Cle Elum, Roslyn, etc., piercing the Cascades through the famous Stampede tunnel and dropping down the picturesque Green river to Auburn station from which a turn to the right takes you to the far famed city of Seattle or to the left to the equally famous rival Tacoma, both of which lie on that wonderful western waterway, Puget Sound, which is flanked by forests and mountains and snow peaks until the eye is never weary of its wealth of magnificent and unsurpassed scenery. From here the route will be over the Northern Pacific, through Vancouver, Washington and across the great new Columbia



CAPE HORN, COLUMBIA RIVER

From this point on through the prosperous valley towns of Kiona, Prosser, Mabton, Toppenish, Wapato, and North Yakima as well as through the branch line towns of Grandview, Sunnyside, and Granger, the route lies through the splendid irrigated volcanic ash lands for which the Yakima Valley is famous, and on which are produced the luscious fruits and the splendid grains, vegetables and grasses which go to make up the enormous per acre tonnage that keeps the Northern Pacific, the O. W. R. & N., and the Milwaukee lines busy the year through.

A special word here about the Yakima Reservation will be in order, for at Toppenish, its eastern center, the nurserymen will spend a day as guests of the Washington Nursery Company.

Arrangements have been made to show the nurserymen a portion of the Reservation, the rich hay and fruit lands thereof, the fine fruit lands under the Sunnyside and Union Gap canals and possibly also a portion of the fruit lands of Yakima and vicinity, which city lies nineteen miles beyond Toppenish, and which has grown from a mere village on a sage brush plain twenty-seven years ago, to a fine modern

and Wilamette river bridges into Portland the Convention city.

### THOSE WHO ARE GOING

The following members of the American Association of Nurserymen expect to leave Rochester, N. Y., on the "Nurserymen's Special" for the Portland Convention, or to join the party along the route. By the time the "Special" is ready to pull out from Rochester, it is anticipated that the number will be largely augmented by some members who have not at this time fully decided to make the trip:

- President Thomas B. Meehan, Dresher, Pa.
- Albert F. Meehan.
- Howard Davis, Wife and Daughter, Baltimore, Md.
- Orlando Harrison and Son, Berlin, Md.
- Chas. A. Ilgenfritz and Wife, Monroe, Mich.
- I. E. Ilgenfritz Sons, Monroe, Mich.
- John H. Dayton, Painesville, Ohio.
- John C. Chase, Derry, N. H.
- L. C. Stark, Louisiana, Mo.
- A. B. Morse, St. Joseph, Mich.





ALFALFA STACK, C. A. LAIDLER'S RANCH, ONE MILE EAST OF TOPPENISH

Leonard Coates, Morganhill, California.  
 W. G. Campbell, St. Joseph, Mo.  
 C. M. Peters and Wife, Salisbury, Md.  
 Mr. Vandervoort, Bloomington, Ill.  
 C. Ernst, Moscow, Ohio.  
 Mr. Cashman, Clinton Falls, Iowa.  
 E. Runyan, Elizabeth, N. J.  
 T. S. Hubbard Co., Fredonia, N. Y.  
 Fooster-Cooke Co., Fredonia, N. Y.  
 Jos. Charlton, Rochester, N. Y.  
 Ralph T. Olcott, Rochester, N. Y.  
 Marsden B. Fox, Wife and Son, Rochester, N. Y.  
 Reilly Bros., Dansville, N. Y.  
 C. W. McNair, Dansville, N. Y.  
 Mr. McCarthy, Lockport, N. Y.

Quite a few delegates will join the "Special" at Chicago.

While this is a fairly good representation, yet it is far from being what it should. The Pacific Coast Nurserymen have worked faithfully for several years to induce the nurserymen to hold the Convention once on the Coast, and they are exerting every effort to make the visit a most successful and interesting one, and the Nurserymen of the east and middle west owe it as a duty to support not only our organization but also show their appreciation of the efforts of the Coast Nurserymen by straining a point and attending the Convention. There is still room in the "Special" for a few more delegates. Send in your reservation at once to M. B. Fox, captain of the "Special," Rochester, N. Y.

### "OUT WEST"

By C. F. LANSING, Salem, Oregon

When you, our eastern friends, come to Portland in June to attend the Nurserymen's Convention, you undoubtedly will note considerable difference between our country and your home section. The first to attract your attention will probably be our scenery. The snow clad rugged peaks of Mount Hood, and Mount Jefferson of Oregon; and Mount Adams, Mount St. Helens and Mount Rainier (Mount

Tacoma) of Washington can be seen from Portland keeping sentinel over the Great Northwest.

The Columbia River will then be in its glory with its ragged walls of rocks towering up two and three thousand feet from the water's edge, with here and there a silvered stream dashing down from their heights to join the Columbia on its way to the mighty Pacific. The fir trees, the fishing wheels and the Cascade Locks, on which the Government spent several millions of dollars, all will be of interest, and can be seen on the free excursion to be given one day of the Convention.

The heavy timbered section can be reached by only a few hours ride from Portland, and no doubt will interest most of you.

We Oregonians are proud of Portland, The Rose City, and we are sure you will fall in love with her too. June is her crowning month, and she will be decked in all her splendor during the Rose Carnival, which will be in progress about the time of the Convention.

Another thing to attract your attention will be the large apple orchards at Hood River, for which Oregon is famous. The strawberries from that section will then be in their prime, and no doubt, you will have an opportunity to sample them.

The prune orchards of the Willamette Valley will be something new, and if you have time, it will pay you to run up to Salem, and take a trip south of the City and see the great prune section. There will also be cherries, such as most of you have never eaten; the pears from Southern Oregon, and berries of all kinds.

But I wish to speak more particularly of the Logan berry. This berry originated in California, but is grown extensively only in the Willamette Valley. During the last two years hundreds of acres have been planted. The berry seems especially adapted to this climate, as it apparently is unable to stand the cold of the eastern winters, and, therefore, promises to be almost exclusively a Pacific Coast bearing berry. The Logan is a purplish-red berry when ripe, but



MT. HOOD AND COLUMBIA RIVER

shaped like a blackberry. Its flavor is similar to the red raspberry, excepting it is much more tart.

About three years ago, someone experimented with drying this berry and it proved to be a great success. Since that time, it has been in great demand.

The Logan juice is also being used as the grape juice, and it makes a delightful drink.

Logans are at their best in July, but I hope a few will be ripe when you are here, so that you may sample them.

We western nurserymen are looking forward to your coming with much pleasure, and we will put forth our best efforts to show you a good time. If you have not yet decided to make the trip, you had best write the secretary at once.

### SPEAKERS AT THE CONVENTION

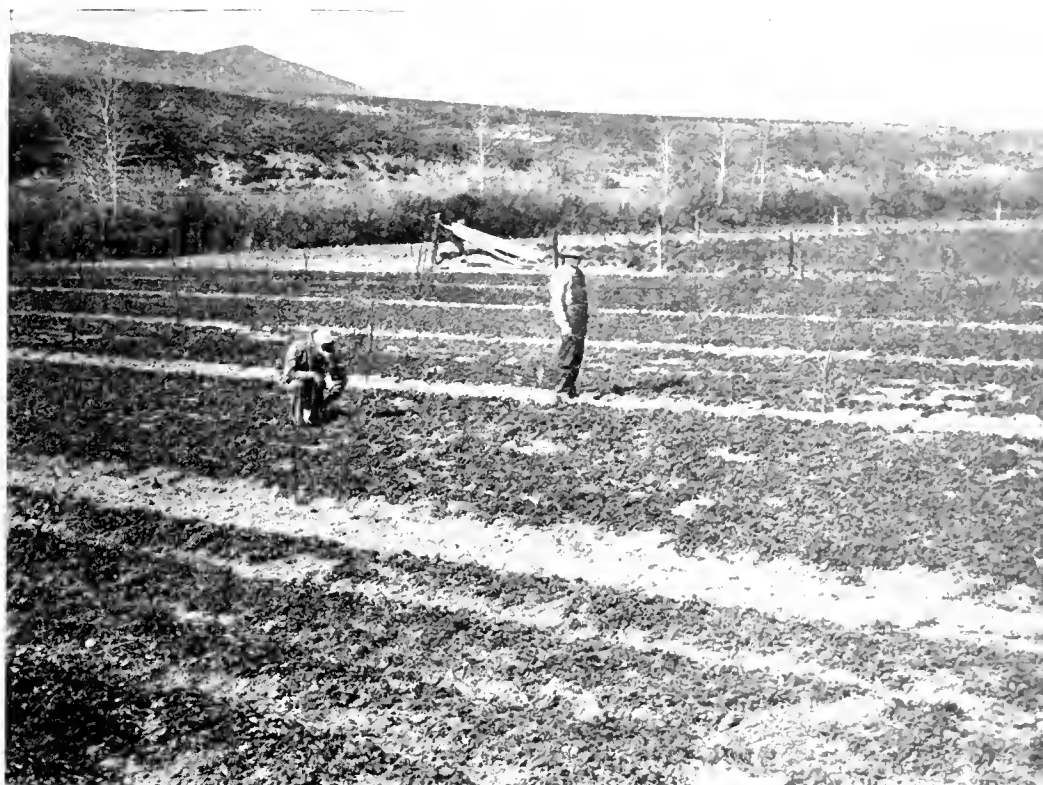
Frank W. Power, Chairman Exhibits Committee, writes: Among the speakers already secured for the program of the convention of the American and Pacific Coast Associations of Nurserymen, to be held in the Multnomah Hotel, Portland, Ore., June 17th-20th inclusive, the following have been secured:

Gov. Oswald, West Salem, Ore.  
 Mayor A. G. Rushlight, Portland, Ore.  
 J. W. Hill, Des Moines, Iowa.  
 P. A. Dix, Roy, Utah.  
 Thomas B. Meehan, Dresher, Penn.  
 Albert Brownell, Portland, Ore.  
 E. W. Kirkpatrick, McKinney, Texas.



CASCADE RAPIDS, COLUMBIA RIVER

George C. Reeding, Fresno, Cal.  
 H. W. Kruckeberg, Los Angeles, Cal.  
 William P. Stark, Neosho, Missouri.  
 J. H. Dayton, Painesville, Ohio.  
 E. S. Welch, Shenandoah, Iowa.  
 Harry B. Chase, Huntsville, Ala.  
 E. T. Mische, (Supt. of Parks), Portland, Ore.  
 J. Horace McFarland, Harrisburg, Penn.  
 Harlan P. Kelsey, Boston, Mass.  
 D. A. MacRoric, San Francisco, Cal.  
 J. McHutchison, New York, N. Y.  
 W. C. Reed, Vincennes, Ind.  
 N. L. Dean, Missoula, Mont. (State Horticulturist).  
 John Vallance, Oakland, Cal.  
 Prof. H. S. Jackson, O. A. C. Corvallis, Ore.  
 A. W. Morrill, State Entomologist, Phoenix, Arizona.



STRAWBERRIES AT BENTON, YAKIMA VALLEY, WASHINGTON

A. J. Cook, State Commissioner of Horticulture, Phoenix, Arizona.

Prof. C. I. Lewis, O. A. C., Corvallis, Ore.  
 Prof. O. M. Morrill, Pullman, Wash.  
 D. J. Tighe, Billings, Mont.  
 F. H. Wilson, Fresno, Cal.  
 Prof. O. M. Morris, Pullman, Wash.

There are quite a number of other speakers whom we expect on this program.

We expect a large delegation from the east, and the western nurserymen will turn out in large numbers to this convention. Expect to make it one of the greatest ever held in the United States.

NATIONAL NURSERYMAN,  
 Rochester, N. Y.

We send you Express Order for \$1.00 to renew our subscription to your paper which we could not very well do without.

Yours faithfully,  
 E. D. SMITH & SON, Limited.





HENRY B. CHASE  
Of Chase Nursery Co., Huntsville, Ala.  
Chairman Executive Committee, A. A. of N.



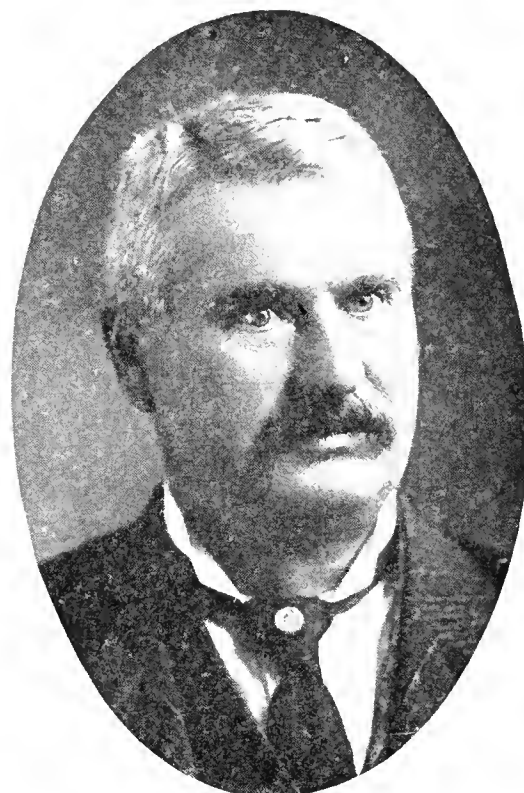
IRVING ROUSE  
Nurseryman, Rochester, N. Y.  
Chairman Tariff Committee, A. A. of N.



WILLIAM PITKIN  
Of Chase Bros. Co., Rochester, N. Y.  
Chairman Committee on Legislation east of  
the Mississippi River, A. A. of N.



WILLIAM P. STARK  
Of Wm. P. Stark Nurseries, Neosho, Mo.  
Chairman Committee on Publicity and  
Trade Opportunity, A. A. of N.



PETER YOUNGERS  
Of Youngers & Co., Nurserymen, Geneva, Neb.  
Chairman Committee on Legislation west  
of the Mississippi River, A. A. of N.



JAMES McHUTCHISON  
Of McHutchison & Co., Importers, New York City  
Chairman Membership Committee, A. A. of N.



L. A. BERCKMANS  
Of P. J. Berckmans Co., Nurserymen, Augusta, Ga.  
Chairman Committee on Co-operation with  
Entomologists, A. A. of N.



SAMUEL A. MILLER  
Of Milton Nursery Co., Milton, Oregon.  
Chairman Committee on Program, A. A. of N.  
Chairman Membership Committee, P. C. A. of N.





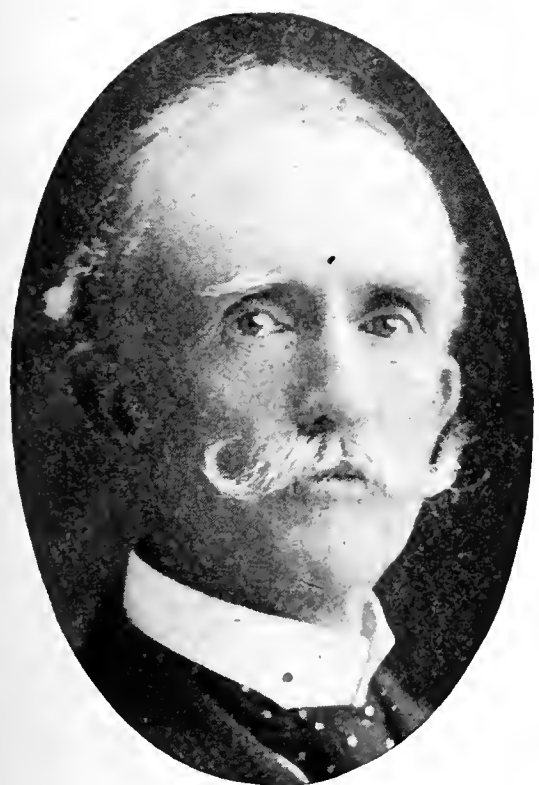
CHARLES M. SIZEMORE  
With Stark Bros., N. & O. Co., Louisiana, Mo.  
Chairman Transportation Committee, A. A. of N.



F. W. POWER  
With Oregon Nursery Co., Orenco, Oregon  
Chairman Committee on Exhibits, A. A. of N.  
Chairman Legislation Committee, P. C. A. of N.



M. McDONALD  
Of Oregon Nursery Co., Orenco, Oregon  
Chairman Executive Committee, P. C. A. of N.



LEONARD COATES  
Morganhill, Calif.  
Chairman Exhibits, P. C. A. of N.



MRS. F. K. SPALDING  
Portland, Oregon  
Chairman Associate-Reception Committee  
P. C. A. of N.

# The National Nurseryman

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Editor ..... ERNEST HEMMING, Flourtown, Pa.

The only trade journal issued for Growers and Dealers in Nursery Stocks of all kinds.  
It circulates throughout the United States, Canada and Europe.

Official Journal of American Association of Nurserymen

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

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Foreign Subscriptions, in advance.....	1.50
Six months .....	1.00

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Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Address, Editor, Flourtown, Pa.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, etc., of THE NATIONAL NURSERYMAN, published monthly, at Rochester, N. Y., as required by the Act of August 24, 1912.

Editor Ernest Hemming, Flourtown, Penna.; Business Manager, Thomas B. Meehan, Dresher, Penna.; Publisher, The National Nurseryman Publishing Co., Rochester, N. Y. Owners: Mrs. Chas. L. Yates, Rochester, N. Y.; James McHutchison, New York City; Thos. B. Meehan, Dresher, Penna.; Albert T. Meehan, Dresher, Penna. [Signed] THOS. B. MEEHAN, Bus. Mgr.

Sworn to and subscribed before me this 30th day of March, 1913.

[SEAL] A. Rothwell Meehan, Notary Public.

[My commission expires January 16, 1915.]

Entered in the Post Office at Rochester, N. Y., as second-class matter.

ROCHESTER, N. Y., JUNE, 1913.

## AMERICAN ASSOCIATION OF NURSERYMEN

PRESIDENT—Thomas B. Meehan, Dresher, Pa.; vice-president, J. B. Pilkington, Portland, Ore.; secretary, John Hall, Rochester, N. Y. treasurer, Chas. J. Maloy, Rochester, N. Y.

EXECUTIVE COMMITTEE—H. B. Chase, Huntsville, Ala.; J. W. Hill, Des Moines, Iowa; P. A. Dix, Roy, Utah; T. B. Meehan, Ex-Officio, Dresher, Pa.; John Hall, Ex-Officio, Secretary, Rochester, N. Y.

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LEGISLATION WEST OF MISSISSIPPI RIVER—Peter Youngers, Geneva, Nebr.

CO-OPERATION WITH ENTOMOLOGISTS—L. A. Berckmans, Augusta, Ga.

PROGRAM—Samuel Miller, Milton, Oregon.

EXHIBITS—F. W. Power, Orenco, Oregon.

ARRANGEMENTS—John Hall, Rochester, N. Y.; J. B. Pilkington, Portland, Ore.

PUBLICITY AND TRADE OPPORTUNITIES—W. P. Stark, Louisiana, Mo.; Jefferson Thomas, Harrisburg, Pa.; Orlando Harrison, Berlin, Md.; C. M. Griffing, Jacksonville, Fla.; G. C. Roeding, Fresno, Cal.; H. D. Simpson, Vincennes, Ind.; James M. Irvine, St. Joseph, Mo.

MEMBERSHIP—James McHutchison, New York City.

## STATE AND DISTRICT ASSOCIATIONS.

American Nurserymen's Protective Association—President, J. W. Hill, Des Moines, Ia.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.

American Retail Nurserymen's Protective Association—President, Charles J. Brown, Rochester, N. Y.; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.

Association of Oklahoma Nurserymen—President, J. A. Lopeman, Enid, Oklahoma; secretary, C. E. Garce, Noble, Oklahoma.

California Association of Nurserymen—President, Frank H. Wilson, Fresno, Cal. Secretary, H. W. Kruckeberg, Los Angeles, Cal.

Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.

Connecticut Nurserymen's Association—President T. E. Burroughs, Deep River, Conn.; secretary, F. L. Thomas, Manchester, Conn.

Eastern Association of Nurserymen—President, Wm. C. Barry, Rochester, N. Y.; secretary-treasurer, William Pitkin, Rochester, N. Y. Meets annually in January.

Idaho Nurserymen's Association—President, W. S. Hawkes; secretary, J. F. Litooy, Boise, Idaho.

Mississippi Nurserymen's Association—President, J. R. Woodham, Newton; Vice-President, W. A. Woods, Tomnolen; Sec'y-Treas., R. W. Harned, Agr. College.

National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.

National Nurserymen's Association of Ohio—President, W. N. Scarff, New Carlisle, O.; secretary, W. B. Cole, Painesville, O.

Oregon—Washington Association of Nurserymen—President, C. F. Breilhaup, Richland, Wash.; secretary, C. A. Tonneson, Tacoma, Wash.

Pacific Coast Association of Nurserymen—President, Albert Brownell, Portland, Oregon; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Meets annually in June.

Pennsylvania Nurserymen's Association—President, Abner Hoopes, West Chester, Pa. secretary, Henry T. Moon, Morrisville, Pa.

Southern Nurserymen's Association—President, W. A. Easterly, Cleveland, Tenn.; secretary-treasurer, A. I. Smith, Knoxville, Tenn.

Tennessee Nurserymen's Association—President, E. W. Chattin, Winchester, Tenn.; secretary, G. M. Bentley, Knoxville, Tenn.

Texas Nurserymen's Association—President, J. R. Mayhew, Waxahachie, Texas; secretary-treasurer, John S. Kerr, Sherman, Texas.

Western Association of Nurserymen—President, Frank A. Weber, Nursery, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

## NURSERYMEN'S DUTIES TOWARDS THE AMERICAN ASSOCIATION

There never was a wiser saying than "In unity there is strength." Nearly everyone has heard of the old fable of the father teaching his sons by the aid of sticks, that when tied in a bundle they resisted their combined strength to break them, but each stick taken individually was easily broken.

The American Association of Nurserymen not only binds nurserymen together, giving them strength to resist attacks from antagonistic interests, but it gives them a power that can make itself felt and a voice that can make itself heard whenever occasion arrives.

Those Nurserymen who founded the Association and those who have so ably and unselfishly worked for it and supported it, deserve the gratitude of every nurseryman in the country, however small his business may be, and not only their gratitude, but support, for every nurseryman has benefitted by it.

Railroad interests, tariff legislation, etc., are all apt to be very inconsiderate of the individual nurseryman, but when the Association speaks, representing as it does millions of dollars in property, it is at least listened to with respect.

If you are a nurseryman it is your duty to support the society because you cannot help profiting by its work. Don't accept these benefits as a charity, but shoulder your share by supporting the Association in renewing, or becoming a member.

Your dues will not go toward making any one rich, but will be spent in your own behalf.

Our business is the finest in the world, but it is young yet and needs developing. Support the men who are giving their time and energy toward this end.

## GROWERS OF CHOICE STOCK NEEDED

The trend of the times, is having its effect on the nursery as well as every other business. Everything seems to be giving way to commercialism, what is called progress and modern methods.

Let us hope the result will be beneficial. At present the outlook is not good from the view point of the old time nurserymen who oftentimes grew plants for the love of them without much thought of whether they paid or not, with the result that many of the old nurseries carried fine collections of choice and rare trees that are only to be found in botanical collections now.

Nurserymen of today are mostly interested in money makers, and they prefer to grow large quantities of easily grown, commoner things that find a ready market, rather than the finer ones that are difficult of propagation and slow to become marketable.

It is largely the foreigner that is eating to the American market in choice and rare plants, and the American grower seems willing to let him, rather than make an effort to grow them himself.

Lack of real interest in plants with the resulting lack of skilled, dependable labor is largely responsible. The greatest need in the nursery business to day is young, intelligent men who want to become growers. Young men who are willing to study as hard at Horticulture as they would have to if they

took up one of the professions as their life work, and not only study books but with the spade in their hands. For such men there is fame and fortune when they can make themselves successful propagators and growers of the choicer and rarer plants, such as *Rhododendrons*, *Azaleas*, Japanese Maples, Box, choice Coniferæ, *Gordonias*, Red Flowering Dogwood, White Judas, *Ilex crenata*, *Andromedas*, Heaths, choice varieties of Beech, etc., etc. The demand now is unlimited and is increasing yearly with little supply except imported stock.

Specialists are needed in all lines to guide the commercialism of the present into the right channels, so that it will produce profitable quality and prevent it from entirely eliminating the finer lines of nursery stock.

The Landscape Gardener cannot work out his designs unless he has the proper material, or the wealthy connoisseur in plants be encouraged to part with his money, if there is nothing to tempt him. The American purchaser seldom counts the cost, if he sees something he likes. It is just as easy to sell a Colorado Blue Spruce at \$10.00 as a Carolina Poplar at 50 cents.

Let us hope and work for the elevation of our business, and bring it on a plane where it belongs.

#### THE NEED OF SKILLED AND TRAINED HELP

The need of skilled and trained help is one of the most vital in the nursery business. It is perhaps not so pressing among the fruit tree growers as among those nurseries which carry a mixed line.

The Colleges, Experimental Stations and Horticultural Schools are doing what they can but they do not turn out trained craftsmen, such as is produced by an apprenticeship to the business.

The process of education is wrong. The book learning and science is all right, but when it is dominant it unfits a man for practical commercial work.

Could the process of education be reversed and the young man after leaving the high school be apprenticed to a nursery for three or four years and then take a course of Horticulture, including chemistry, physics and botany at one of the colleges we should have more proficient nurserymen.

The need of skilled labor is even more pressing and the nurseryman is at a disadvantage in training it. Few nurseries can afford to carry sufficient men all the year round to really take care of the work during the busy season, in the way they would like to see it handled.

In the vicinity of large cities where a man can get \$2.00 or \$3.00 per day at unskilled labor, such as conductor on a street car, it is difficult to hold men even with assurance of steady employment.

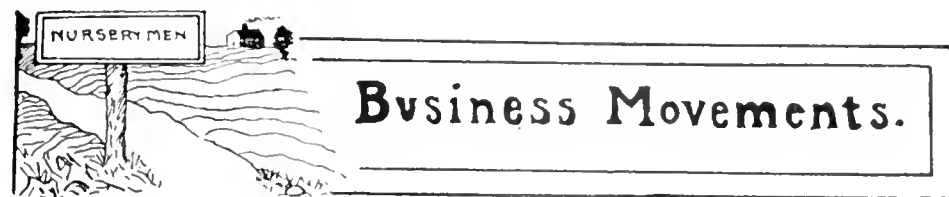
There should be more inducements to boys to take up nursery work; more consideration should be given them in regard to hours, Saturday afternoons and those small things that loom so large in the eyes of youth.

Many a good nurseryman has been lost because a factory or some other employment allowed of Saturday afternoon to play ball.

Conditions on the nurseries have been very much like those on the farm, unattractive to youth. If boys can be induced to

work on the nursery a good proportion will stick to the business, especially if encouragement be given them as they begin to look to the future.

All progressive businesses are recognizing the fact that they must cater to the advancement and comfort of their employees, because it pays.



The Forest Nursery & Seed Co., at Irving College, has been incorporated, with a capital stock of \$5,000.00. The incorporators are Messrs. J. H. H. Boyd, F. C. Boyd, J. R. Boyd, A. P. Hill, P. N. Moffitt, I. H. Hillis, E. R. Martin and Geo. Wagner.

Northfield Seed & Nursery Company announces that it has secured the services of Frederick Barnes, formerly with J. Beaudry & Son, leading nursery men of Chicago. Mr. Barnes will superintend the growing of nursery stock at the Company's nursery. With the services of a horticulturist of extensive experience in this country and in England we are prepared as never before to help beautify Northfield. Besides being a practical plant propagator Mr. Barnes is a landscape architect who has designed and set out many beautiful parks and grounds.

#### PAULOWNIA IMPERIALIS

A tree that attracts a great deal of attention in the vicinity of Philadelphia, is the *Paulownia imperialis*, which at this writing is in full bloom. The flowers come before the leaves, which make it very conspicuous, especially when seen against a background of green. The color of the flower is pale blue, so that unless it has a background when seen against the sky, as it usually is, the trees being very large, the color is scarcely discernible. It is of wonderful rapid growth. For the first year or two the trunks of the trees get killed back to the ground every winter, but the succeeding growth in the spring is always much stronger, and a three or four year old roots will throw up stems 14 to 16 ft. high and 2 to 2½ caliper in one summer, with leaves as large as 18 inches across. If these trunks are wrapped with newspaper they will stand the winter's sun and frost, and after they have once come through one winter, the tissues seem to harden sufficiently to enable them to stand succeeding winters without protection. It is a native of China and I believe was named after the Empress Pauline. It suggests the *Catalpa* in general appearance, shape of leaves and size of flowers, and while perhaps through its rapid growth the tree is somewhat coarse in appearance it is extremely showy when in flower, owing to the immense quantity of bloom it produces about the first of May. The flowers really come out before the leaves have obtained very much size, in the same manner as the Chinese Magnolia. The flower buds are formed the fall previous and are quite conspicuous on the tree during the winter, in addition to the cluster of round seed pods that also remain on the tree from one year's end to another. It seems to thrive best on well drained situations.



# THE THIRTY-EIGHTH ANNUAL CONVENTION OF THE AMERICAN ASSOCIATION OF NURSERYMEN

PORTLAND, OREGON, JUNE 17-21, 1913

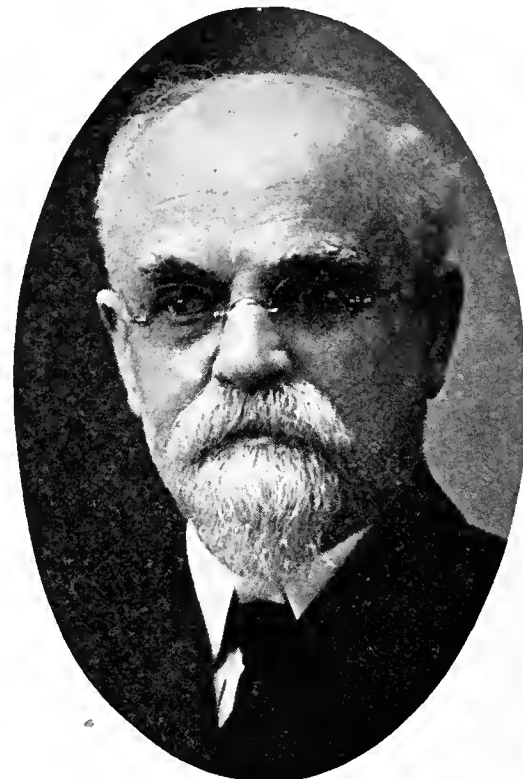
## THE PROGRAM



THOMAS B. MEEHAN  
Of Thomas Meehan & Sons, Nurserymen,  
Dresher, Pa.  
President A. A. of N.



J. B. PILKINGTON  
Nurseryman, Portland, Oregon  
Vice-President A. A. of N.  
Chairman Committee of Arrangements, A. A. of N.  
Chairman Transportation Committee P. C. A. of N.



JOHN HALL  
Rochester, N. Y.  
Secretary A. A. of N.

### Tuesday, June 17th

Pacific Coast Nurserymen's Association Business Session.

9:30 A. M. Reception for Members and Visitors.

10:30 A. M. Announcements by President.  
Minutes of Last Meeting.  
Reports of Vice-Presidents.

### Reports of Committees

Transportation—J. B. Pilkington, Portland, Ore.  
Membership—S. A. Miller, Milton, Ore.  
Exhibits—J. A. Stewart, Christopher, Wn.  
Legislation—

### Tuesday, 2 P. M.

Executive Committee—M. McDonald, Orenco, Ore.  
Secy.-Treas. Report—C. A. Tonneson, Tacoma, Wash.  
Report of Committee of Presidents—M. McDonald, Orenco, Ore.  
Question Box  
Election

### Tuesday, 8 P. M.

Pacific Coast Protective Association

### Wednesday, June 18th, 9 A. M.

Music

Address of Welcome—Governor West.  
Address of Welcome—Mayor Rushlight.  
Response—For American Association—  
For Pacific Coast Association—P. A. Dix.



CHARLES J. MALOY  
With Ellwanger & Barry, Nurserymen  
Rochester, N. Y.  
Treasurer A. A. of N.

President's Address—American Association—  
Thomas B. Meehan.

President's Address—Pacific Coast Association—  
Albert Brownell.

### "What Shall the Future of Horticulture Be?"

E. W. Kirkpatrick, McKinney, Texas.

Discussion—Geo. C. Roeding, Fresno; H. W. Kruckeberg, Los Angeles, Cal.

(Subject to be Selected).

William P. Stark, Neosho, Mo.

(Subject to be Selected).

J. H. Dayton, Painesville, Ohio.

Discussion—J. B. Morey, Dansville, N. Y.;  
F. W. Watson, Topeka, Kas.

Question Box—Conducted by Secretary John Hall

### Wednesday, 1:30 P. M.

Music

### "The Traffic Manager"

E. S. Welch, Shenandoah, Iowa.

Discussion—Henry B. Chase, Chase, Ala.; J. B. Pilkington, Portland, Ore.

### "Park Making on the Pacific Coast."

E. T. Mische, Supt. of Parks, Portland, Ore.

Discussion—J. Horace McFarland, Harrisburg, Penn.; Harlan P. Kelsey, Salem, Mass.;  
D. A. MacRorie, San Francisco, Cal.

### "Care of Small Fruit Plants—Duty of Nurseryman and Planter"

L. J. Farmer, Pulaski, N. Y.

Recess—4:00 P. M.

**Wednesday Evening**

Local Entertainment.  
Features to be announced later.

**Thursday, 9:00 A. M.**

Music

**"Working and Results of the New Federal Horticultural Law."**

J. McHutchison, New York City

Discussion—D. S. Lake, Shenandoah, Iowa; John S. Armstrong, Ontario, Cal.

**"Horticultural Laws."**

Geo. C. Roeding, Fresno, Calif.

Discussion—W. C. Reed, Vincennes, Ind.; Peter Youngers, Geneva, Neb.; M. L. Dean, State Horticulturist, Missoula, Mont.

**Friday, 9 A. M.**

American Association Business Session.

Report of Secretary—John Hall.

Report of Treasurer—Chas. J. Maloy, Rochester, N. Y.

**Committees**

Executive—Mr. Henry B. Chase.

Co-Operation with Entomologists—L. A. Berekmans, Augusta, Ga.

Legislation—East of Mississippi River, Wm. Pitkin.

Legislation—West of Mississippi River, Peter Youngers.

Publicity and Trade Opportunities—W. P. Stark.

Transportation—Chas. M. Sizemore.

Tariff—Irving Rouse.



ALBERT BROWNELL  
Nurseryman, Portland, Oregon  
Manager Portland Wholesale Nurseries  
President P. C. A. of N.



H. A. LEWIS  
Of Russellville Nursery Co., Portland, Oregon  
Vice-Pres. and Chairman Reception  
Committee, P. C. A. of N.



C. A. TONNESON  
Tacoma, Wash.  
Secretary-Treasurer, P. C. A. of N.

**"Oregon's New Quarantine Law."**

Discussion—W. K. Newell, Gaston; F. A. Wiggins, Toppenish, Wash.; John Vallance, Oakland, Calif.

Question Box.

**Thursday, 1:30 P. M.**

Music

**"Nurserymen's Problems in Fungus and Bacterial Diseases."**

Prof. H. S. Jackson, O. A. C.

Discussion—A. van Holderbeke, Spokane, Wash.; A. W. Morrell, State Entomologist, Phoenix, Ariz.

**"Uniform Horticultural Laws: Their Enforcement and Benefits."**

A. J. Cook, Sacramento

D. J. Tighe, Billings, Mont.

Discussion—F. H. Wilson, Fresno, Calif.

(Subject to be Selected).

Prof. C. I. Lewis, O. A. C.

**"Between the Nurseryman and Fruit Grower"**

Prof. O. M. Morris, Pullman

Brief Discussion—L. C. Stark, Louisiana, Mo.; Chas. P. Hartley, Emmett, Idaho.

**Thursday, 7:45 P. M.**

Paper by (Subject and Speaker to be announced).

British Columbia

Meeting of American Nurserymen's Protective Association.

Meeting of State Vice-Presidents: (Time to be announced).

Membership—James McHutchison.

Root Gall—E. A. Smith.

Entertainment—J. B. Pilkington.

Program—Samuel Miller.

Exhibits—F. W. Power.

Vice-Presidents—

Election of Officers.

Unfinished business.

Resolutions.

**ENTERTAINMENT**

**Wednesday Evening**

Features to be announced by Committee.

**Friday, 12:00 Noon**

Attendants are invited to become guests of the Oregon Nursery Company on a Trolley Trip to their Nurseries at Orenco, where lunch will be served at 1:00 P. M. After inspection of the Nurseries and recreation, the return trip will be made, arriving at Portland late in the afternoon.

**On Saturday**

Excursion on the famous Columbia River, given by the Local Nurserymen. Steamer "Bailey Gatzert," leaving at Alder Street Docks. Time to be announced.

This is considered one of the finest scenic trips in the United States.



# BRITISH COLUMBIA INVITES EASTERN NURSERYMEN TO PARTAKE OF ITS BEAUTIES WHEN ON THEIR TRIP TO PORTLAND

By A NURSERYMAN

Nurserymen throughout the Eastern and Central states who are contemplating attending the convention of the American Association of Nurserymen in Portland, Oregon, next June, should not fail to include in their itinerary a trip through the fruit districts of British Columbia.

This Western Province of Canada is a vast Empire of which most people know but little. When you consider that its area is 355,855 square miles it is extremely difficult to appreciate how large a Province it really is, until we compare it with states or provinces of which we are more or less familiar.

The Province of British Columbia has an area greater than the states of New York, New Jersey, Pennsylvania, Virginia, West Virginia, North Carolina, South Carolina, Ohio, Indiana, Vermont, New Hampshire, Connecticut and Massachusetts combined. Its population of course, is not nearly so great, but according to statistics, it had in 1911 a population of 392,000 as compared with 178,000 in 1901. In other words, it has more than doubled its population in 10 years which certainly indicates something of the development that has been going on within the vast fertile Province in the last decade.

British Columbia has a vast variety of resources, but naturally the fruit business is the one most interesting to nurserymen and there are a number of sections in the Province in which the fruit industry is carried on quite extensively and along modern lines, which would prove of special interest to Nurserymen. The lower Fraser River Valley which is one of the oldest settled sections of the Province is a very fertile valley land in which are to be found many well kept orchards. It is, however, in the higher altitudes where commercial fruit growing has developed most extensively.



YOUNG PEAR TREE NEAR KENNEWICK, WASHINGTON

The Okanagan district which lies tributary to the Okanagan Lake in the south central part of the Province is one that has already won wide distinction in the production of peaches and apples. A little farther east is the Kootenay district, embracing the territory tributary to the Arrow, Shuswap and Kootenay Lakes. This is an extensive district, reaching from the National Boundary on the south, to Revelstoke on the north and is a section worth while visiting.

The territory along the Canadian Pacific through the upper Thompson River affords another section that is fast developing into horticultural prominence. In this section are such growing towns as Lytton, Ashcroft, Kamloops, Salmon Arm and Sicamous.

Separate from the main land by the strait of Georgia is Vancouver Island, where some of the finest fruit-land in the Province is to be found.

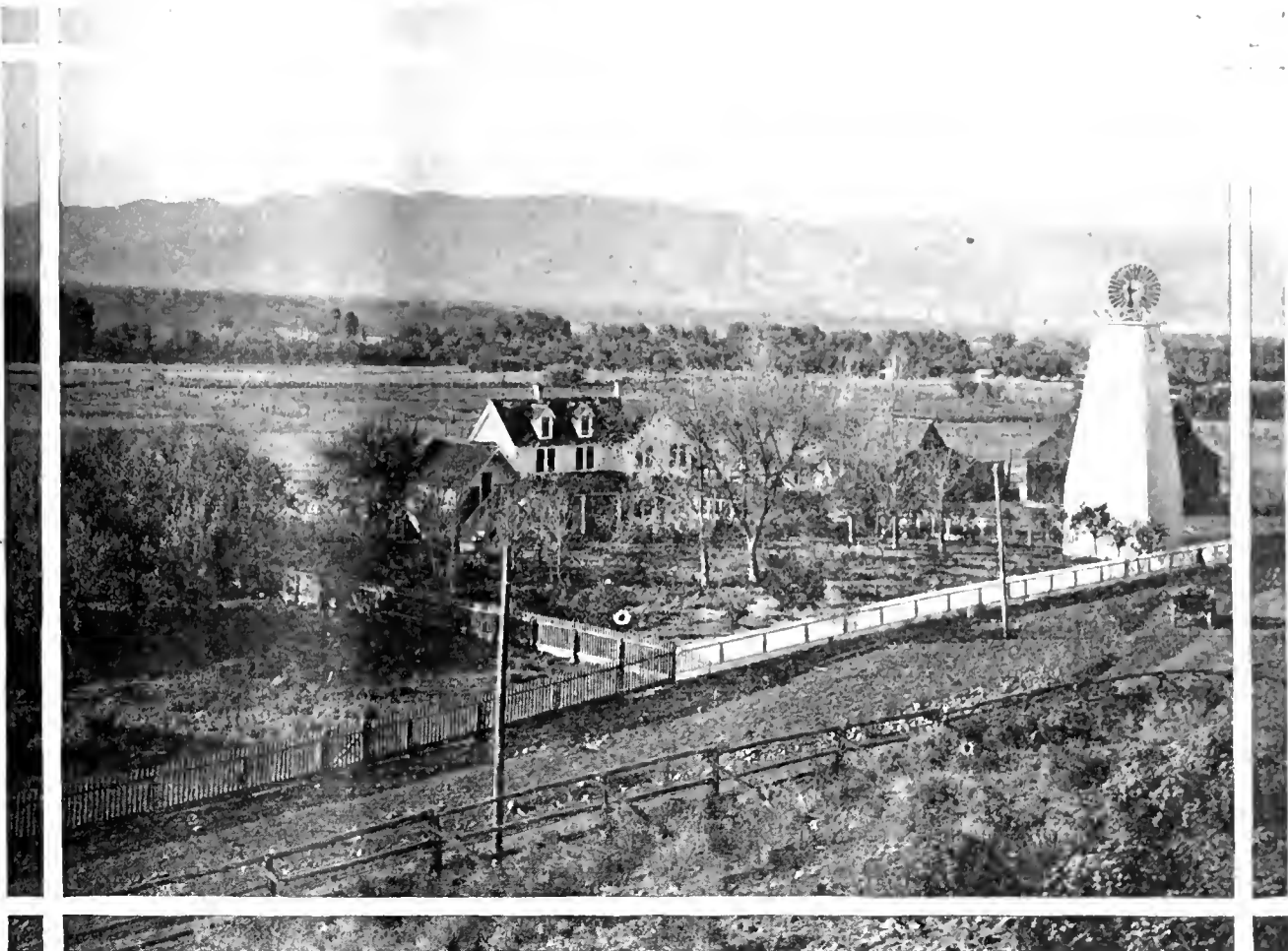
Vancouver Island holds many points of interest for pleasure seekers and throughout the greater portion of the Province he will find the ever present evidence of his brother nurserymen.

For the sightseer and tourist, British Columbia abounds in material and there is no end to the points of interest one might visit or the variety of pleasure to partake of. Leaving Portland, the Convention City, and known throughout the world as the "City of Roses," it is only a few hours ride by train to Seattle, where a steamer can be taken bound for either Victoria or Vancouver. A steamer ride on the placid Puget Sound with the snow capped mountains of the Olympic range on your left and those of the Cascade on your right, with the shores only a short distance away, showing a mingling of farm and forest, and then crossing the breezy strait of Juan de Fuca, certainly is a trip anyone, and



particularly an inlander would enjoy. The trip from Seattle to Victoria, only consumes a few hours, in fact, it does not seem half long enough. Victoria, which is the capitol of British Columbia, is a city of 35,000 population and is one of the cleanest, prettiest and most interesting cities of its size one will find and a week could be spent in and around Victoria with pleasure and benefit. Proceeding to Vancouver through the Strait of Georgia, dotted with its innumerable islands, makes your steamer ride one long to be remembered. Arriving at Vancouver, which is the largest city in the Province, and which at its present rate of growth, will soon hold its place with the older cities on the coast, is likely to prove a surprise and wonder when you consider its youth and view its magnitude. With numerous sky-scrapers; large wholesale and retail districts, manufactures, parks and other evidences of permanent development, standing as an evidence of the progressive western spirit. Vancouver has one of the finest harbors in the world and ships from all nations can be daily seen at its wharfs.

The writer will not attempt to enumerate the points of interest which visitors should take in, either in Vancouver or the Province but it will surely repay anyone to take a trip through British Columbia and by arranging your return trip over the Canadian Pacific, it will enable you to see some of the most sublime mountain scenery on this continent, and many who have had the good fortune and pleasure to visit Switzerland and other foreign countries, claim that the mountain scenery along the Canadian Pacific excels that to be seen in



FARM SCENE IN THE JOHN DAY VALLEY, OREGON

any European country. The scenery cannot be described in words. By getting stop overs at such points as Sicamous it will enable you to take in the Okanogan fruit districts; then from Revelstoke you can take in the Kootenay district. By all means you should stop over at such famous resorts as Glacier and Banff, which are among the most scenic spots on the route.

While at Vancouver, if time would permit, a steamer trip up the coast to Prince Rupert, the western terminal of the Grand Trunk, as well as to such points at Ketchikan, Wrangel, Junacau and Skagway, Alaska would be fine. Steamers make regular trips to these points during the summer months and it is a trip well worth the time and expense. British Columbia is so large in area, so varied in resources and possibilities, so wonderful in her natural scenic beauties that it is out of the question to do justice to her in mere words, but if any of our eastern brethren of the American Association will take the time to visit some parts of this vast Empire, he will certainly return home feeling well repaid and he will find his Brother Canadian Nurserymen and British Columbians in general a cordial, whole-hearted lot of people.

### THE 1914 CONVENTION

With the Portland meeting so close at hand, the delegates are already discussing the question of the place for holding the 1914 Convention. It is generally conceded that as last year it was held in the extreme East and this year in the extreme West, the logical location for next year must be in a more central spot. It is understood that Cleveland will make a strong effort to secure it for 1914.



PEAR ORCHARD NEAR KENNEWICK, WASHINGTON

THE EARLY FRUIT BELT

By C. T. BREITHAAPT, Richland, Washington

The earliest fruit belt of the Pacific Northwest is probably located in Benton and Franklin Counties centering at Kennewick and Richland, Washington, and comprising a valley up and down the Columbia River about 40 miles each way and not more than 10 miles to 15 miles at its widest place. This little valley was but a few years ago a barren, sand-swept plain where the jack-rabbit and coyote held full sway. But with the western movement of man came the master-mind who conceived the idea of irrigating a small portion of this barren desert and the results obtained from this were so marvelous that it almost reads like a fairy tale. From this first venture, capital has seen where it was possible to reclaim this acreage and make it the abiding place of man and incidentally gather in a few golden shekels.

There is probably not another area of like size that has gathered to itself so quickly the reputation for being an early fruit section. This section has gone extensively into the fruit business, raising strawberries as the principal crop between the rows; while the trees are coming into bearing. These begin ripening about the first of May and reach their prime in a week, for when two weeks old, every man, woman and child takes themselves to the strawberry fields to help gather in the blushing berries. The berries on account of their earliness command fancy prices, bringing at the opening of the season as high as \$15.00 for 24 quart crate and gradually dropping in price until the end of the season finds them selling at \$2.00 per crate. The 1912 crop averaged better than \$2.65. Hundreds of acres are being added each year and yet the supply is inadequate. So much for the strawberry, though planted extensively it by no means monopolizes the whole field. There are many acres planted to asparagus which comes on at the first of the season, commanding the best prices. Another plant that is coming into its own more each year is rhubarb, which grows to perfection. In the bush fruits we have the gooseberry, currant, the raspberry and the blackberry, which find their way to the market very early.

In the tree fruits everything that has been tried out gives the best results that it is possible to obtain. These again are

the first to find their way to the fruit counter where they command fancy prices, having practically no competition.

The climatic conditions are such that there are but two seasons, summer and winter, the transitions from one into the other being so gradual that it is hardly noticeable. The summers are warm and dry, as the rainfall for the season is but seven inches and this falls mostly during the winter months. The winters are very mild, the thermometer rarely going below zero and then only for a few days at the most.

The irrigated sections have advantages which probably none other enjoy, in that the farms are seldom larger than 20 acres and more often only five acres; this means a thickly populated territory, which brings social, religious and school advantages only equalled by the city.

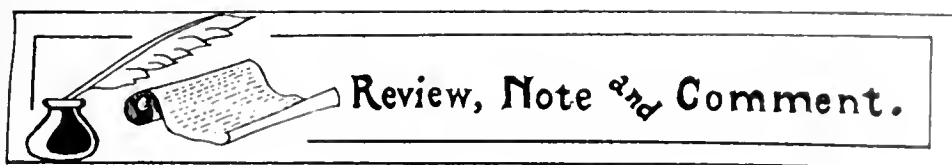
The rural school house is a thing of the past and the centralized school with its newer and better way having taken its place. Bus-drivers hired by the district, bring in the scholars in the morning and return them to their homes at night. By this system all grades are taught and the high schools are on the accredited list permitting its graduates to enter any of the state schools without passing an examination.

Other advantages are the telephone and electric light service in every farm house where wanted; these together with the Rural Free Delivery combined with a parcel-post make ranch life a life to be envied by the city man and not a life to be pitied. These conditions find their ideal place under intensified farming and more especially under irrigation.

The nurserymen throughout the United States will be interested to learn that Mr. Norbert Levavasseur of the old, well known firm of Levavasseur & Fils, of Ussy and Orleans, France, will visit this country with his wife, leaving Havre about May 31st, they expect to join the through nurserymen's train for the Portland Convention at Chicago on the morning of June 17th. It will be a keen pleasure for Mr. Levavasseur to meet again many old, personal friends after quite some years of absence, when last he visited the United States, calling upon many of the nurserymen with whom this firm has maintained the most agreeable relations.

“THE MONTHLY SUMMARY OF COMMERCE AND FINANCE” FOR MARCH, 1913, GIVES THE FOLLOWING REPORT OF IMPORTS OF PLANTS, TREES, SHRUBS AND VINES.

ARTICLES	MARCH—				SEVEN MONTHS ENDING MARCH—					
	1912		1913		1911		1912		1913	
	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values
Plants, trees, shrubs and vines:										
Fruit plants, tropical and semi-tropical, for propagating purposes <sup>2</sup> .....		2,035	.....	947	.....		.....	22,284	.....	3,372
Bulbs, bulbous roots, or corms, cultivated for their flowers or foliage .....	1,965	19,571	2,027	19,419	.....	1,546,530	215,469	1,708,771	287,673	1,813,793
All other.....dut..		220,375	.....	251,044	.....	869,509	.....	928,384	.....	1,071,140
Total.....		241,981	.....	271,410	.....	2,416,039	.....	2,659,439	.....	2,888,305



Bulletin No. 7 of the American Gladiolus Society is before us. While it does not contain much of interest to other than members, it is evidence these beautiful plants are being well looked after, and great progress is being made in their development along the right lines.

Pacific Horticultural Correspondence School, Orenco, Oregon, sent us a booklet on "Loganberry Culture and Loganberry Juice." It is well written, simple, understandable and speaks well for their methods of teaching. An extract from it giving the cost per acre for setting out Loganberries is as follows:

The cost per acre for setting out Loganberries, figuring labor at \$2.00 per day, is as follows:

Cost of plowing (twice and fitting land) . . .	\$ 6.00
Cost of setting 680 plants (each man one acre) . . .	2.00
About 180 cedar posts at 10c . . . . .	18.00
500 pounds galvanized wire at 3c . . . . .	15.00
Digging holes and anchoring end posts . . . . .	5.00
Hauling in and setting posts . . . . .	3.00
Stretching wire and stapling . . . . .	3.00
Dead men for anchoring and staples . . . . .	1.00
	<hr/>
	\$53.00

Of course this will be increased by an advance in the price of posts, wire or labor, or on the other hand decreased by a decline of prices, but I think it is a fair estimate of the average cost. The cost of plants will vary in different years and will also be governed as to whether tips or yearling transplants are used.

W. W. Essig & Company, Nurserymen and Orchardists, 242 Griswold Street, Detroit, Michigan, want to get in touch with someone who cans small jars of fruit as samples.

H. G. Benchhuysen of H. den Ouden & Son, Boskoop, Holland, and John Ryken, with H. M. Hardyzer, nurserymen of Boskoop, Holland, called at the office of the NATIONAL NURSERYMAN and reported business to be brisk.

James McHutchison, chairman of the Membership Committee of the American Association of Nurserymen, reports that his campaign of new members has resulted in an addition of 118 to date. This is certainly a splendid record, and indicates that Chairman McHutchison did some tall hustling to procure such results.

EDITOR NATIONAL NURSERYMAN:

Dear Sir:

We are immensely pleased to be able to advise you that all of the following amendments to Tariff Bill H. R. No. 3321 have been adopted by United States Congress in response to

our demand for a Tariff free from the errors and ambiguities in former Tariffs.

No. 1. Page 53, line 11, Section 215, the words "and all other decorative or greenhouse plants" are omitted. This will make Orchids, Palms, *Azaleas* and cut flowers dutiable at 25% advalorem, and all other greenhouse or nursery stock not otherwise stated at 15% advalorem under Section 216. It will avoid disputes as to what is greenhouse stock or nursery stock.

No. 2. Page 53, line 14, Section 215, the word "bulbs is" added after Hyacinths. This changes "Hyacinth clumps" to Hyacinth bulbs, dutiable at \$2.50 per 1000 bulbs.

No. 3. Page 53, line 16, Section 215, the word "herbaceous" is prefixed to Paeony. Some paeonies as *Paeonia Moutan* are grafted shrubs and not bulbs and are dutiable at 15% advalorem under Section 216 instead of \$10.00 per 1000 under Section 215.

No. 4. Page 53, line 18, Section 215, changed so as to read "all other roots, rootstocks, corns and tubers." This will aid in exact classification and avoid expensive disputes.

No. 5. Page 53, line 22, Section 216, the words *Rosa Rugosa* are added after *Multiflora*. This is a most important change, it makes *Rosa Rugosa* seedlings three years old or less dutiable at \$1.00 per 1000 unquestionably. The Government cannot say now collect duty of \$40.00 per 1000 as Roses on *Rosa Rugosa* Seedlings are sold at \$3.00 per 1000 as under former Tariffs. This will save honest importers much expensive litigation and will largely prevent fraudulent entries of budded roses as briar roses.

No. 6. Page 122, line 6, Section 600, the word "Coniferous" is prefixed to evergreen seedlings and the words "four years old or less" are added. This correction is of inestimable value to the government and honest importers, it should prevent Boxwood, Bay Trees, *Rhododendrons*, Koster Blue Spruce, *Kalmias*, etc., being brought in free by reason of fraudulent entries as evergreen seedlings, it will also make large evergreens five years old or more dutiable at 17% advalorem under Section 216.

These amendments correct and simplify the Tariff immensely as applied to horticultural imports. It will make it much easier for the Customs officials to detect and correct fraudulent entries, it should avoid expense to honest importers now that "Evergreen Seedlings," "Briar Roses," etc., are defined, and it will largely prevent the confusion and abuses which have arisen under former Tariffs owing to incorrect varying Treasury decisions handed down at different ports of entry on the one item. These amendments do not change the rates of duty on proposed Tariff in any way, to have recommended them would have meant the defeat of our important demands—a Tariff free from errors and ambiguities.

Let us take this opportunity of thanking YOU, the Government officials, Congressmen and the numerous friends in the trade who have helped and supported us in this campaign, the benefits of which are obvious to every florist, nurseryman and seedsman in the United States who either directly or indirectly handles imported stock.

Respectfully yours,

McHUTCHISON & Co.



## INJURY OF NURSERY STOCK IN STORAGE

By V. B. STEWART

In charge Nursery Disease Investigations, Cornell University.

Throughout the past four years the Department of Plant Pathology of the New York State Agricultural College has had under investigation several of the most important diseases of nursery stock. This work was conducted for the first two years in accordance with the terms of an Industrial Fellowship agreement between the college and the C. W. Stuart & Company nursery firm of Newark, N. Y. Since that time there has been an Industrial Investigatorship agreement with the nursery firms of C. W. Stuart & Co., Newark, N. Y., Chase Brothers Co., Rochester, N. Y., Brown Bros. Co., Rochester, N. Y. and Jackson & Perkins Co., Newark, N. Y.

At various times a number of the larger nurseries in New York State have been visited to obtain information on special problems such as "Winter Killing" of trees and a particular injury to stock which becomes apparent while the trees are in storage.

During the past four years several complaints have been received from different nurserymen concerning the injury of nursery stock while in the storage cellar. The percentage of stock injured has frequently been high and has caused heavy losses, due to the fact that the trees were unsalable at the time of spring shipping.

The injury is first noticeable in the tips of the branches and the smaller twigs appear dead and dried out. Often the large branches and trunk are affected and the trouble may even extend to the roots. Cankered areas are apparent on the trunks of the more severely injured trees and the bark is discolored, brownish or black. A sharp line of demarkation indicates the boundary between the green healthy bark and the dead tissue. The dead cankered area may only involve definite portions of the trunk or on the other hand the injury may be so severe as to completely girdle the tree; under such conditions a greater portion of the top is usually dead and the tree must be rejected at packing time.

A common grayish-white mold is generally present on the affected tissues and may often be a means of detecting the first signs of injury while the trees are still in the stalls. This mold, however, certainly cannot be a primary factor in causing the trouble. This is evident from the fact that where a twig or root has been broken off or the bark of the tree injured in any way the fungus is usually found growing on the wound as a saprophyte. It does not live on healthy bark.

Numerous theories have been suggested as to the cause of the trouble, but in some instances there is little support for the opinions advanced. Records show that fluctuating temperatures and conditions of humidity have not been so unusual in the cellars where this injury has occurred as to be considered an important factor. Tramping on the tops and rough handling after the trees are dug, as has been suggested, can hardly cause the trouble from the fact that carefully handled trees have been known to be affected.

From the observations made and the information obtained from different nurserymen's experiences, the conditions as discussed below appear to be more important in causing the injury. The trouble was especially noticeable

in one nursery where the digger was run under the trees before the leaves were stripped and several days intervened before the trees were pulled. In this particular case, the trees, with the leaves still on, were shipped in closed cars to the storage cellar and were frequently two to four days in transit. Under such conditions trees are known to "sweat," thus increasing the temperature in the car several degrees. Delay in handling at the cellar before the foliage is stripped and the stock placed in the stalls is also a factor which would favor the injury.

Although the above methods of handling peach stock have been practiced for years by various nurserymen without any losses yet it is probable that the weather conditions the past two seasons were such as to render the trees more susceptible to injury. Increased precipitation throughout the latter part of the season, causing late growth prevents the proper ripening of wood of the trees before digging time. The tops are frequently tender and succulent and there is a superabundant development of new buds which under ordinary conditions would have remained dormant until the next year. It is natural to expect that trees which are immature when dug are not in the best condition for storage, and thus more liable to injury, especially when they have been subjected to the adverse conditions in handling as mentioned above.

Some nurserymen claim to have avoided the injury by storing the trees at a temperature below freezing. The roots are packed in excelsior and no attempt whatever made to regulate the temperature, it being governed by conditions existing outside the cellar. This factor has not received careful enough attention to draw definite conclusions but there is one objection to be raised; with a mild winter similar to that of 1912 the temperature may not be low enough for a considerable part of the time, especially in November and December to freeze the trees. Also a fluctuating temperature causing freezing and thawing in the cellar certainly is not ideal for storage conditions.

Owing to the limited amount of study given to this problem it is not possible at the present time to make definite recommendations with reference to the absolute prevention of this peach injury but it does seem logical as a general practice to avoid certain conditions and methods of handling the stock there by eliminating several factors which might be important in causing the trouble. Strip the leaves immediately before or immediately after the trees are dug. Avoid "sweating" when the trees are shipped in cars; hasten the shipments to the cellar and store the trees with the least delay possible. (Hand stripping of peach stock in the field requires considerable time and expense, however, the writer has seen stripping machines in use which gave good satisfaction.)

As a general consideration the factor which appears important at least in making the trees more susceptible to the injury is the condition of maturation at digging time. Avoid planting on low and wet land, get good drainage to decrease the water content of the soil during excessive rain periods, also discontinue late cultivation when there is an increased rainfall in the latter part of the growing season. Avoid late growth and improper ripening of the trees in every possible way.

The injury evidently occurs in the field before the trees are stored and is not to be considered a storage problem simply because it becomes apparent after the trees have been in the cellar for a period of time.

Losses have also occurred from a similar trouble to cherry, plum, rose, pear, and in one or two instances apple stock, but the damage has never been so important as in case of peach trees. The injury is apparently the same—the twigs are killed back and frequently a greater portion of the top is involved. Some varieties are often injured more than others, but the difference in susceptibility of varieties is not constant. The trouble appears to be local, one block of stock may be injured while other trees of the same variety grown in the same vicinity may come through the winter apparently unaffected. It is possible that this variation is due to differences in conditions of the soil, drainage, amount of cultivation, and so forth. Most certainly these factors influence the maturation of the trees and from all indications still immature when dug are more susceptible to the injury.

The writer is informed that it is a common practice for growers of seedling stock in Europe to "sweat" the tops of the trees in order to remove the leaves. This procedure is necessary when seedlings are dug early in the fall for export shipment. Since the trees are dug before the wood is properly matured, the foliage naturally clings to them and requires such a treatment as the "sweating" process in order to remove the leaves. If the treatment were rather severe the tender bark might be injured, and thus show the effects of the injury when received a few months later. Such a condition apparently explains the injury manifest in several boxes of apple and rose stocks received by different nurserymen during the past winter. The tops of the seedlings were dead and dried out and showed a similar injury to that affecting the peaches and other stock grown in this country.

From the large number of tests made it is safe in concluding that this particular trouble is not contagious. The injury does not spread from affected trees to healthy stock. Trees showing various stages of injury have been planted at different times, and in every case vigorous shoots have been put forth below the point of injury. Some of these are developing into thrifty orchard trees.

Owing to the objections raised by the trade on receipt of such trees, it appears perfectly legitimate for the nurserymen at shipping time to cut off the injured twigs or branches when the trunk of the tree is not affected too severely. Usually peaches are trimmed to a whip when set out, and trimming the top to some extent before the trees leave the cellar should not decrease their sale value. It is perhaps better for the nurserymen to burn the badly affected trees rather than have them rejected by his customers. It appears practicable for nurserymen to plant injured seedling stock providing the injury is not so severe as to interfere with the development of a stock suitable for budding.

On the other hand it is suggested in every case that the opinion of one familiar with the pathological problems be obtained before any injured stock is shipped from the cellar or planted in the nursery.

## INSPECTION LAWS

May 16, 1913.

The NATIONAL NURSERYMAN,  
Rochester, N. Y.

Gentlemen:

We are enclosing herewith a letter received recently from the State Board of Agriculture of Massachusetts relative to the treatment of nursery stock infected by root-gall. If this ruling of the Federal Horticultural Board is to be universal, we fear results to the nurserymen who are growing stock in quantity will be very disastrous.

We have just had a large consignment of imported *Azaleas* burned, because of being infected with root-gall, also quite a bunch of *Crataegus* and Flowering Apples.

Kindly advise us if nurserymen in other states are having experience of a similar nature.

Yours truly,  
BRECK-ROBINSON NURSERY CO.,  
A. E. Robinson.

Boston, May 2d, 1913.

Mr. A. E. Robinson,  
Care Breck-Robinson Co.,  
Lexington, Mass.

Dear Mr. Robinson:

In regard to the attitude of the Federal authorities in the matter of crown-gall infected stock, I quote the following from a letter received from Mr. W. A. Orton, member of the Federal Horticultural Board: "I have advised with Dr. Erwin F. Smith and Mr. M. B. Waite, our leading specialists on this subject, and find them in practical agreement on the policy outlined below.

All plants found infected by root-gall should be destroyed. This procedure is followed in our own nurseries. It is established that while some of these might thrive when planted out and make a partial success others would struggle along and live for years as half failures, while others would go down rapidly, and all would serve for infecting other plants.

Non-infected stock in a consignment containing cases of root-gall need not be destroyed, especially where the uninfected stock is conspicuously healthy, and where it exceeds 50 per cent. of the whole. On the other hand, where the infected stock exceeds 50 per cent. and the remaining material is questionable or doubtful, it might be proper to destroy the entire shipment."

There seems to be no misunderstanding about the attitude of the Federal authorities in this matter, and all crown-gall infected stock coming into this State will be handled in the manner indicated, unless it is practicable to return it to the consignor as in the case of interstate stock where the consignor so desires.

I will plan to have the stock destroyed in the near future which was found infected with crown-gall and placed in quarantine at our nurseries.

Very truly yours,  
W. S. REGAN,  
Chief Deputy Inspector.

## JUDGMENT IN FAVOR OF W. C. REED IS SUSTAINED

The following decision was rendered by Judge Lewis April 29th in regard to the application of the defendant for a new trial in the Colorado Inspection Case after being under consideration some three months.

UNITED STATES OF AMERICA, }  
District of Colorado, } ss:

IN THE DISTRICT COURT OF THE UNITED STATES FOR THE  
DISTRICT OF COLORADO  
No. 5695

W. C. REED, Plaintiff, }  
vs. }  
F. L. ROUNSEVELL, Defendant. }

The jury returned a verdict in favor of the plaintiff in the sum of \$152.42, on which judgment was at once entered, and for costs expended by the plaintiff. Defendant on argument of his motion for a new trial calls attention to Section 968 Rev. Stats. which prohibits the allowance of costs to a plaintiff who recovers less than \$500. It seems that the Court erred in the rendition of judgment in that respect.

Van Sieten vs. Bartol, et al., 96 Fed. 796;

Allen vs. Fairbanks, 45 Fed. 445;

Maxwell vs. A. T. & S. F. R. Co., 34 Fed. 286, 291;

McKay vs. Jackman, 17 Fed. 641, 644.

Error is also alleged on the action of the court in placing the burden of proof. To sustain this point, Wilkes vs. Dinsman, 7 How. 89, is relied on; but the burden in such an issue as this was put upon the defendant in Lawton vs. Steel, 152 U. S. 133, and later approved in North American Cold Storage Co., vs. Chicago, 211, U. S. 306, 316. Pearson vs. Xehr, 138 111, 48 holds the same.

The motion for a new trial will be overruled and the judgment corrected as to the matter of costs.

ROBT. E. LEWIS, District Judge.

Dated Denver, Colo., April 29th, 1913.

(Endorsed) 5695 U. S. district court, district of Colorado.

W. C. Reed vs. F. L. Rounsevell. MEMORANDUM OF  
OPINION ON MOTION FOR NEW TRIAL. Filed Apr. 29, 1913.  
Charles W. Bishop, Clerk. A true copy,

Teste:

CHARLES W. BISHOP, Clerk.

By Albert Frego, Deputy Clerk

The suit grew out of the condemnation and destruction of a lot of approximately 10,000 Apple trees shipped over two years ago by Mr. Reed to a customer in Colorado. Mr. Rounsevell, then State Inspector, condemned the trees and ordered them destroyed, claiming that they were affected with crown-gall and other dangerous diseases.

The Western Nurserymen's Association took up the case and subscribed a fund of \$250 to help fight the case. Other individual Western nurserymen added \$500 more, and at the annual meeting of the American Association of Nurserymen, held in Boston, last June, the details were laid before the Association and an appropriation of \$1,000 was voted, making a total of \$1,750 available.

SUGGESTIONS FOR TRANSPORTATION  
COMMITTEE

NEW YORK, May 19, 1913.

Committee on Transportation,  
American Association of Nurserymen,  
Mr. D. S. Lake, Chairman.

Dear Sirs:

In your interesting report at the Boston meeting of the Association last year there are two or three matters that it seems desirable should have further consideration and action at the Portland meeting next month, viz.:

(1) The complicated "official classification" situation.

(2) The tendency toward official action in changing the classifications, as you state in your report, with "little chance the shippers have of learning of a change until after it has been made."

(3) And perhaps more important than all to the Nursery interests of the country—the adoption of a plan of co-operation between our Association and the trunk line officials, by which the vexatious delays and enormous losses resulting from the lack of despatch in the transportation of nursery stock may be, in a measure at least, eliminated.

(1) The practical working out of the official classification problem is manifestly so complicated from the varied interests involved and the lack of adequate legislative authority under which the Government Commissioners are acting, that it appears hopeless to do more than urge this subject with other Trade Organizations, and assist as far as may be the public officials having this matter in charge.

The efforts of your Committee toward this end will undoubtedly receive the approval and commendation of the Association.

(2) The tendency to change the classification, and by this simple process thereby effect a considerable advance in rates, is a far more simple and direct proposition. The action of the Southern railroads, effective June 12, 1912, in changing the car-load classification from sixth to fifth class and less than car-load consignments from fourth to third class, as stated in your report last year, is a case in point. This plan of materially adding to the burden of cost of nursery stock transportation is so quietly, so quickly, and so easily effected that in the absence of any active organized opposition, is it not reasonable to anticipate a similar "boosting" of rates by the Eastern and Western trunk line Associations? The persistent contention for advancing rates by all the railroads will naturally take the course of the least resistance, and I believe it of the utmost importance that your Committee and the Association take immediate action, if you have not already done so, toward urging, and if possible preventing, throughout all the classification territorial Associations the changing of these nursery and plant classifications, as mentioned.

(3) But even a moderate increase in transportation rates, objectionable as they would be, could hardly be as detrimental to the trade and deadly to the whole nursery business of the country as the inexcusable delays in transportation.

Of all the hit-and-miss methods in vogue in this telephone-telegraph-and quick transit year of our Lord 1913, the way



nursery stock is handled by the railroads is the limit. This condition is as indefensible as it is intolerable. Even carload shipments cannot be made at the average shipping point with any clearly defined assurance or expectation when the stock will reach destination. And as to less than carload, if one wishes to keep his good nature, the least said the better.

Now it was this condition that led me to offer the resolution on this subject at the Boston meeting a year ago. The Committee on Resolutions in not reporting favorable action, were presumably sincere in thinking that your Committee or previous Committees, had already covered the line of action I had in mind. It was apparent, however, that the Committee had in mind something entirely different from what was intended by the resolution. As there was not time for discussion when the Committee reported, the matter, as you will recall, went over by non-action.

Another year's shipping experience of my own company emphasizes again in my thought the need of some action toward remedying present conditions. As I shall not be at the Portland meeting perhaps I may state to you what I had clearly in mind in offering that resolution.

It was, that your Committee "with full power to act" for the Association should take up at headquarters—with the leading trunk line officials in direct charge of transportation (usually one of the vice-presidents) the adoption of a simple and direct plan for treating at every point from the great centres to the cross-roads, all nursery stock as a perishable product, and by a simple system of tracing or otherwise by the companies own wires, put a stop to the needless side tracking of the vast number of consignments as are now ruinously held back under the present lack of system.

The head officials of our great railway systems are for the most part broad gage men, responsive to suggestions along co-operative lines for mutually better results. Those at the head of the transportation departments are no exception to the rule. The losses the companies would avoid in paying, as now, for stock ruined by delay, becomes at once a self-interest factor in their favoring any practical scheme for improved transit methods. I have every confidence that much could be accomplished along these lines by your Committee, and this conviction has grown out of my own experience for the past few years in dealing with this question.

In carload shipments particularly, the results have been as immediate as they have been gratifying—not only in avoiding delay either from or to local or distant points, but being advised without trouble, inconvenience or expense of the arrival and delivery of the cars at destination. This plan of procedure would cost our Association but little to try. If it has ever been attempted in the way I have indicated I do not know of it. Even if but partially successful, or only in one classification territory, I believe the results would be greatly appreciated by both the Association and the public as well.

Sincerely yours,

(Sd.) FRED'K W. KELSEY, President.

## MUCH ENTHUSIASM REPORTED

Secretary John Hall writes that the Badge Book will contain a larger number of names of members than any previous issue, and that reports from Messrs. Pilkington, Miller, Powers and Tonneson all indicate liberal plans for entertainment, and it would be a great disappointment to the Coast Nurserymen if the American Association is not well represented. It is expected that a good number of members will join the official car which starts from Rochester, at Chicago. The C. B. & Q. representative will be on hand to add such additional cars as may be needed, both at Chicago and St. Paul. He urges everybody to boost up the Portland convention and adds that Cleveland is putting in a strong bid for 1914.

## BLISTER RUST OF THE WHITE PINE

This disease was first found in this State on pine trees imported from Germany in 1909 and later was found in seedlings imported from France. One lot of nearly a million young pine trees, some of which showed disease and the remainder were believed to be infected, were burned on the theory that it was better to lose the trees while young rather than scatter them about the State and thus spread the infection.

All the remaining plantings have been annually inspected, and diseased trees wherever found were destroyed. Very few were found in 1912.

Last year a large number of black currant plants were found infected by the rust which produces the disease in the five-leaved pines. This outbreak raises complicated problem for investigation and their solution is being sought.

It is the intention that this destructive contagion of the the pines shall be eradicated and no effort shall be spared to rid the State of the disease before it escapes control. The Federal Government has quarantined against importation of white pines from countries where the rust is known to prevail.

Descriptive circulars and colored plates of the above described insects and fungi are available for applicants to the Department of Agriculture, Albany, N. Y.

Commissioner Huson hopes this information will be widely circulated and that he may have the cooperation of all persons in locating and suppressing the destructive insects and diseases that threaten the trees of the State.

## THE THIRD INDIANA APPLE SHOW

The third Indiana apple show will be held November 5-11, 1913. Between \$4,000 and \$5,000 will be offered in premiums.

DO YOU GROW APPLES? If you do you will find a special and appropriate class for your fruit, whether you have two trees or two hundred acres. Your co-operation in the apple show campaign will increase the value of your orchard.

Begin now to care for your orchard so that your exhibit will be a winner. If you wish to keep in touch with Apple Show plans, receive directions for spraying your trees and get a copy of the premium list, sign and return this card and your name will be put on the mailing list.

C. G. WOODBURY, Secretary,  
Purdue University Experiment Station, Lafayette, Indiana.



From the U.S.D. of A.

## BULLETINS OF INTEREST TO NURSERYMEN

By R. A. Cushman, Agent and Expert. VI. Notes on the Peach Bud Mite. By A. L. Quaintance, in Charge of Deciduous Fruit Insect Investigations. VII. The Grape Scale. By James F. Zimmer, Entomological Assistant. Pp. 132, pls. 10, figs. 27. (Bulletin 97, Bureau of Entomology.) Price, 25 cents.

PAPERS ON DECIDUOUS FRUIT INSECTS AND INSECTICIDES. The Fruit-Tree Leaf-Roller. By John B. Gill, Entomological Assistant. Pp. iv+91-110, pls. 5. (Bulletin 116, Part 5, Bureau of Entomology.) Price, 10 cents.

NEW MEXICO STATION, State College, L. Foster, Director.

GRAPE CROWN GALL INVESTIGATIONS. By F. Garcia and J. W. Rigney. (Bulletin 85, pp. 28, figs. 4.)

Tests of the resistance to crown gall of a number of varieties of grapes are reported, together with a description of the different varieties. A description of the disease as reported in Bulletin 183 of the Bureau of Plant Industry of this department is included.

WISCONSIN STATION, Madison, H. L. Russell, Director.

THE WISCONSIN NURSERY AND ORCHARD INSPECTION SERVICE, 1910-1912. By J. G. Sanders. (Bulletin 227, pp. 38, figs. 13.)

This bulletin gives an account of the nursery inspection work in the State during 1910-1912, together with a list of names and addresses of licensed nurserymen and dealers, and brief descriptions of the more important nursery insects and diseases and their control. Copies of the State nursery and orchard inspection law and of the insecticide and fungicide law are appended.

IOWA STATION, Ames, C. F. Curtiss, Director.

THE PEAR SLUG (*Caliroa cerasi* [*Eriocampoides limacina*]). By R. L. Webster. (Bulletin 130, popular edition, pp. 8, figs. 5.)

This is a popular edition of this bulletin.

Summary of Bulletin No. 355 on Grape Stocks for American Grapes by U. P. Hedrick, issued by the New York Agriculture Experiment Station.

Different species of grapes show wide variations in adaptability to natural and cultural conditions. Cannot grape-growers take advantage of these variations and graft varieties that fail under some conditions on roots of those that thrive under the same conditions?

The possibility of improving the viticulture of New York by such grafting was the inspiration of an experiment at this Station to test various root stocks for the best varieties of American grapes.

In this experiment three groups of varieties have been grafted on St. George, Riparia Gloire and Clevener stocks and a fourth group on their own roots. The varieties grafted on

these stocks were: Agawam, Barry, Brighton, Brilliant, Campbell Early, Catawba, Concord, Delaware, Goff, Herber, Iona, Jefferson, Lindley, Mills, Niagara, Regal, Vergennes Winchell and Worden.

The experiment was tried on the farm of I. A. Wileox, of Portland, Chautauqua County, New York, in the Chautauqua Grape Belt. The vines were grown in two plats on two kinds of soil—Dunkirk gravel and Dunkirk clay. The planting plan and all of the vineyard operations were those common in commercial vineyards.

The original plan was to graft only on growing stocks but the loss of a large proportion of the grafted plants the first few years made it necessary to resort to bench-grafting on rooted plants as well. Later experiences show that bench-grafting on cuttings is probably the best method of starting a grafted vineyard.

Yearly accounts of the vineyard show that the vines passed through many vicissitudes. The experiment was started in 1902 when St. George and Riparia Gloire stocks from California were set and grafted in the field. Many of these died the first year. The winter of 1903-04 was unusually severe and many more vines were either killed or so severely injured that they died during the next two years. The vines on St. George, a very deep-rooting grape, withstood the cold blast. Fidia, the grape root-worm, was found in the vineyards early in the life of the vines and did much damage in some years. In the years of 1907 and 1909 the crops were ruined by hail.

But despite these serious setbacks it was evident throughout the experiment that the grafted grapes were better vines. And so, though the experiment is a partial failure through accidents, the results are thought to be worth publishing.

Tables II and III show that the grafted grapes are more productive than those on their own roots. As an example of the differences in yield, a summary of the data for 1911 from Table III may be given. In this year an average of all the varieties on own roots yielded at the rate of 4.39 tons per acre; on St. George, 5.36 tons; on Gloire, 5.32 tons; on Clevener, 5.62 tons. The crops on the grafted vines were increased through the setting of more bunches and the development of larger bunches and berries.

The grapes on the grafted vines ripen a few days earlier than those on their own roots. This holds, in particular, as regards Gloire and Clevener, while with St. George a few varieties were retarded in ripening. Time of maturity is very important in this region, where there is danger of early frost to late ripening sorts and where it is often desirable to retard the harvest time of early grapes.

In the behavior of the vines the results correspond closely with those given for yields. In the relative growth ratings of varieties on different stocks the varieties on their own roots were rated in vigor at 40; on St. George, at 63.2; on Gloire, at 65.2; on Clevener, at 67.9. There is no way of deciding how much the thrift of the vines depends on adaptability to soil and how much on other factors. Since all of the varieties were more productive and vigorous on grafted vines than on their own roots, it may be said that a high degree of congeniality exists between the stocks and varieties under test.

The experiment suggests that it would be profitable to grow some of the fancy grapes of the region on grafted vines

and that it is well within the bounds of possibility that main-crop grapes can be profitably grafted.

It is recommended that grape-growers try small vineyards of grafted grapes, using as stocks the three tried in this experiment.

For procedure in growing a grafted vineyard the experiences given in this Bulletin should be taken in account, supplemented by a study of methods in California where grafted vineyards are commonly grown. Some of the practices in California are discussed on pages 512-514 but a more extended study of them should be made before engaging largely in growing grafted grapes.

This Station is repeating this experiment; it is hoped under more favorable circumstances.

The following is a summary of Bulletin No. 359 The Grape Leaf-Hopper by F. Z. Hartzell, published by the New York Agricultural Experiment Station.

This bulletin deals with studies on the hibernating habits and spring food-plants of the grape leaf-hopper and with experiments to establish efficient spraying practices.

Large numbers of adults survived the winter of 1911-12 and threatened many vineyards, but weather conditions during the summer were unfavorable for the nymphs, causing a decrease of the insects during the late summer and autumn of 1912.

The most favorable hibernating places for the leaf-hopper are fence rows, woods, brush and waste land, weeds or situations where leaves accumulate by the wind. Grass which has lodged also affords winter shelter to the insects. The drier, well-drained soils are more conducive to the safe wintering of the adults than the heavier soils.

Green cover crops do not afford suitable hibernating places for the grape leaf-hopper during severe winters.

The foliage of raspberry, strawberry, blackberry, currant, gooseberry, catnip, Virginia creeper, burdock, beech and sugar maple is eaten by the grape leaf-hopper before it migrates to the foliage of the grape. Strawberry and raspberry are the preferred spring food plants. The insects migrate from the strawberry to the raspberry during early May and from the raspberry to the grape during the latter part of May.

Mating of the hibernated adults takes place on the spring food plants.

The foliage of the grape is injured by the overwintering adults, but most of the feeding is restricted to the lower leaves, especially those on the young shoots or suckers at the base of the vine. The amount of injury to vineyards varies directly with their proximity to favorable hibernating places and spring food plants.

Spraying experiments during 1912 showed (1) that Black Leaf 40, one part to 1600 parts of water or bordeaux mixture, is an efficient spray for the leaf-hopper. (2) The automatic attachment is a practical machine in the hands of careful sprayers. (3) The fruit from vines protected from the leaf-hopper is superior to fruit from vines subjected to the attacks of this pest. Chemical analyses of grapes from sprayed vines gives a gain of from 8 to 68 per cent. in sugar over those from untreated vines, while the unsprayed grapes had from 0 to 20.6 per cent. more acid than sprayed grapes.

The destruction of hibernating places of the grape leaf-hopper is recommended as a method of control, especially to save the young foliage of the grape in the spring.

When hibernating adults are on the young foliage, delaying the removal of the young shoots at the base of the vine will tend to keep the insects on the lower leaves and thus afford some protection to the more permanent foliage. The lower shoots should be removed just previous to spraying.

#### FROM THE NEW JERSEY STATION

The First Season with the Peach Orchard. By M. A. Blake. (Circular 14, pp. 3-31, pls. 10, fig. 1.)

Information is given as to the selection of the site and soil for peach orchards the grade, quality, cost, and treatment of nursery trees before

Digest and Copy of Insecticide Law. (Circular 11, pp. 4.)

This contains the text and brief explanations of the New Jersey insecticide law approved March 19, 1912.

#### INVITATION FOR 1914 CONVENTION

Mr. T. B. MEEHAN, President,  
American Association of Nurserymen,  
Dreshertown, Pa.

Dear Sir:

The Los Angeles Chamber of Commerce extends to the officers and delegates to the Annual Convention of the American Association of Nurserymen, which meets in Portland, Ore., June 18-20, 1913, a cordial invitation to make their return trip via Los Angeles and to spend a few days in this city and in other parts of Southern California.

We promise you an interesting and pleasant diversion and feel sure that you will find many things to interest you in Southern California in connection with the important industry which you represent. It will enable you to personally inspect the orange and lemon growing industries, as well as the extensive grape culture of this section, together with the various species of fruit common to the temperate zones. You will also have an opportunity of visiting our beach and mountain resorts, which are unsurpassed in beauty in any part of the world.

We will be obliged to you if you will give this invitation a wide publicity.

Yours truly,  
LOS ANGELES CHAMBER OF COMMERCE,  
ARTHUR W. KINNEY, President,  
FRANK WIGGINS, Secretary.

#### MR. P. A. DIX WAS THE AUTHOR

Through an oversight the name of the author of "A New Quarantine," as published in the April NATIONAL NURSERYMAN was not given. It was Mr. P. A. Dix, Roy, Utah. Mr. Dix is to be congratulated on his ability as a writer, and we sincerely hope it is not the last time nurserymen will be entertained by his pen through the columns of the NATIONAL NURSERYMAN.



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HARDY NATIVE PERENNIALS: We collect 1,000,000 of these annually, including Trilliums, Lilies, Ferns, Cypridium and other orchards. Phlox, Crythroniums, Etc. Must have orders on these while tops are still visible.

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**American Agents, AUGUST RÖLKER & SONS, New York, 31 Barclay Street or P. O. Box 752.**

When writing to Advertisers please mention The National Nurseryman

# NURSERYMEN

We Invite You to Visit Our Nursery while at the  
CONVENTION. We have a Large Block of  
**Two-Year-Old Apple Trees**

In All Leading Varieties. Also Pear, Plums,  
Cherries, etc., and a Complete Stock of Yearlings.  
WAIT until you see US before Ordering for  
1913-1914.

If Unable to attend the Convention Send List of Your Wants.

**Oregon Nursery Company,**  
**Orencia, - - - - - Oregon**

We are now ready  
to quote prices on  
a fine assortment  
of Select Nursery  
Stock for Delivery  
Fall 1913 and  
Spring 1914 :: ::



Established 1870

**Apple**---One and two year  
**Cherry**---Iowa, New York and Indiana Grown  
**Peach**---One year. Good selection  
**Pear**---Standard and Dwarf. Budded on French  
pear and quince roots  
**Plum**---Native, European and Japanese  
**Currants**---All Leading Varieties  
**Grapes**---New York Vines  
**Gooseberries**---Acres of Downing, Houghton,  
Champion and Red Jacket

## **Small Fruits, Shade Trees and Ornamentals**

**Forest Tree Seedlings**---A Large Supply  
**Imported Fruit Tree Stocks**---A Full Line  
All Grades

**Apple Seedlings**---One of our Leading  
Specialties

Let us have your list of wants. Will save you money.

**The Shenandoah  
Nurseries**  
**Shenandoah, Iowa**

D. S. LAKE, Proprietor

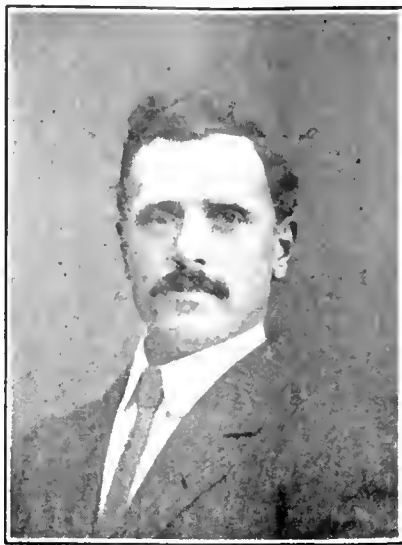


# VERKADE VAN KLEEF

Nova Nurseries, Waddinxveen, Holland

NEAR BOSKOOP

Nova Waddinxveen  
Cable-Address  
ABC Code 5th Ed.



W. VAN KLEEF, Jr., Proprietor

Nurseries  
at Boskoop and  
Waddinxveen

## ASK FOR MY SILENT SALESMAN

SPECIALTIES: Acer, Ampelopsis, Azalea, Boxwood, Clematis, Climbing Plants, Conifers, Hydrangea, Kalmia, Magnolia, Paeonia, Rhododendron. Roses--dwarf and standard. Shrubs, Young Stock for lining out, Etc., Etc.

## Forest Tree Seedlings

20 acres of ASH SEEDLINGS from 6 inches to 4 feet at interesting prices.

Cuttings in all the leading varieties.

Shade Trees in Car Load Lots

Write for Price List or Send Us Your Want List

**Whiting Nursery Co.**

Box 11

Yankton, S. Dakota

## Evergreen Seedlings and Transplants

FALL OR SPRING DELIVERY.

TREE SEEDS COLLECTED ON ORDERS.

**The North-Eastern Forestry Co.**

New Haven, Conn.

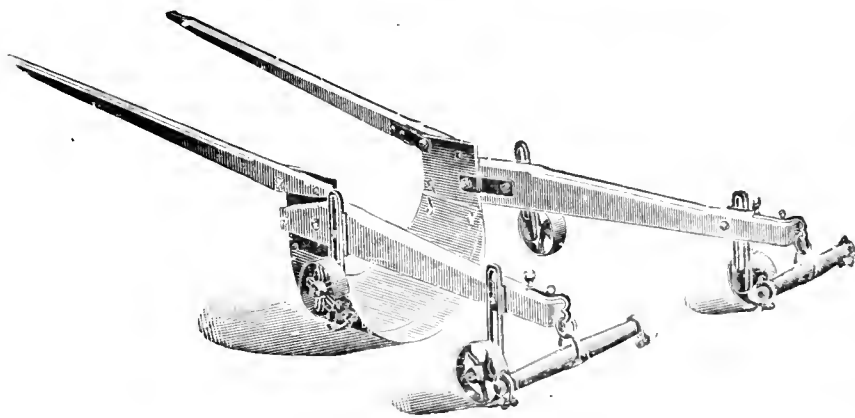
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**BRAGG'S**

COMMON SENSE

## TREE DIGGER

Repairs Always on Hand. Send for Catalogue

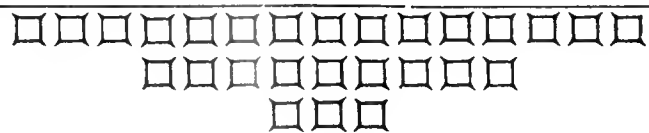


Digger gets all the roots at the rate of 20 to 40 thousand trees per day, and only needs same power as plow.

**L. G. BRAGG & CO.**  
Kalamazoo, Mich.

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FOR NURSEYMEN AND FLORISTS ARE EXCELLED BY NONE



PLAIN, PAINTED, WIRED in any combination with TINNED or COPPER wire and PRINTED in ANY MANNER that may be called for. Prices as low as FIRST CLASS WORK and UNEQUALLED PROMPTNESS in DELIVERY will justify. Please favor us with a trial order if you are not one of our present patrons. : : : : : :



## THE BENJAMIN CHASE CO.

P. O. Address, Derry Village.

DERRY, NEW HAMPSHIRE

Western Union Telegraph

LET ME QUOTE YOU prices on all Conifers and Broad-leaved Tree and Shrub Seeds. Guaranteed fresh, true to name and good germination.

J. F. Von HAFFTEN, Consulting Forester  
WINFIELD JCT., L. I.

We offer to the Trade in stock that is strictly first class, for early Fall or Winter shipment:

APPLE. 1 in. up;  $\frac{3}{4}$  to 1 in.;  $\frac{5}{8}$  to  $\frac{3}{4}$  in., and smaller grades. Long on commercial sorts.

CHERRY. 1 in. up;  $\frac{3}{4}$  to 1 in., and all smaller grades. Specially attractive proposition on Cherry in car lots.

PEACH. 1 year and June buds.

PEAR. Long on Kieffer and Garber, all grades.

FIGS, JAPAN PERSIMMON, MULBERRY, GRAPE,  
EVERGREENS, SHADE TREES

CALIFORNIA PRIVET

*Your want list will be appreciated*

**WAXAHACHIE NURSERY CO.**

J. R. MAYHEW, President

WAXAHACHIE, TEXAS

**ROSES**  $2\frac{1}{2}$  in. for lining out;  
4 in. for short lists.

Own Roots

**THE LEEDLE FLORAL COMPANY**  
SPRINGFIELD-OHIO

**J. H. SKINNER & CO.**  
Capital Nurseries, Topeka, Kan.

**Extensive  
Growers  
of  
General  
Nursery  
Stock**



We offer for Fall, 1913  
Apple trees (grafted), one and two years  
Apple trees (budded), one and two years  
Kieffer and Garber Pear, one and two years  
Gooseberries Rhubarb, Shade Trees,  
Ash, Elm (White), Elm (English),  
Maple, Mountain Ash, Carolina  
Poplar, Volga Poplar, White Walnut,  
Black Walnut, Honey Locust, Sycamore, Flowering Shrubs,  
Vines, Apple Seedlings, Japan and  
French Pear Seedlings, Catalpa  
Speciosa, Honey Locust Seedlings.

## Northern Grown Nursery Stock

We Grow a General Assortment of Trees, Shrubs, Vines, Roses and Herbaceous Perennials, Etc.

Prices Reasonable. Wholesale Trade List for the Asking.

**The Bay State Nurseries, North Abington, Mass.**

When writing to Advertisers, please mention The National Nurseryman

## ALL NURSEYRMEN

Wanting **FRUIT TREE SEEDS** and **EUROPEAN Forest Tree**  
Seeds of the very best quality at low prices should write  
for special offers to

## FRITSCH & BECKER

Wholesale Seedsmen

Grosstabarz, Germany

Offers of American Tree Seeds appreciated.  
Code 5th Edition A. B. C. used.

A Large Stock of

## Apple, Pear, Cherry and Peach Grape Vines, Blackberry and Raspberry Plants

And a general line of **ORNAMENTAL TREES** and  
**SHRUBS**. All stock clean and thrifty, the best that  
can be grown.

**T. B. WEST, Perry, Ohio**

We hold one of the finest stocks in England of 2 yr.  
field grown **Hybrid Tea Roses** on the seedling  
briar, also a large collection of **Standard Roses** on  
briar stock.

**Hardy American Rhododendrons** of the best  
varieties, such as the *Sargents, Chas. Dickens, E. S. Rand,*  
*Sefton, Old Port, Evererlianum, Etc., Etc.* We grow 60  
acres of Named Rhododendrons.

250,000 Manetti Stocks first grade, grown on sandy ground and guaranteed  
well rooted at bottom of stock.  
25,000 Pinus cembra, from 6 in. to 3 ft.  
25,000 Andromeda florabunda, in all sizes up to 2 ft.  
5,000 Abies parryana Kosteriana from 1 ft. to 4 ft.

Windlesham  
Nurseries

**W. FROMOW & SONS**

SURREY,  
ENGLAND

ESTABLISHED 1866

## W. T. HOOD & CO.

OLD DOMINION NURSERIES

**RICHMOND, VA.**

Growers of a general line of

## HIGH GRADE NURSERY STOCK

OFFER FOR FALL, 1912, Peach, Pear, Cherry, Plum.  
California Privet, 1 and 2-year, extra fine. : : :

SEND US YOUR LIST FOR QUOTATIONS

## SPHAGNUM MOSS

### BURLAPPED and WIRED

Fresh clean moss from new marsh,  
full sized bales :: :: :: ::

## VAUGHAN'S SEED STORE

CHICAGO

NEW YORK

## The Josselyn Nursery Co.

FREDONIA, N. Y.

(Successors to George S. Josselyn)

### GRAPE VINES OFFER GOOSEBERRIES CURRANTS

in all leading varieties. Stock has made the strongest  
and most vigorous growth in years.

WRITE FOR PRICES

## Charles Detriche, Senior

ANGERS, FRANCE

Grower and Exporter of Fruit-Tree Stocks,  
Forest Tree Seedlings, Rose Stocks, Shrubs,  
Vines, and Conifers for Nursery Planting.

For all information as to Stocks, prices, terms, etc., address

## JACKSON & PERKINS CO.

(SOLE AGENTS)

NEWARK, N. Y.

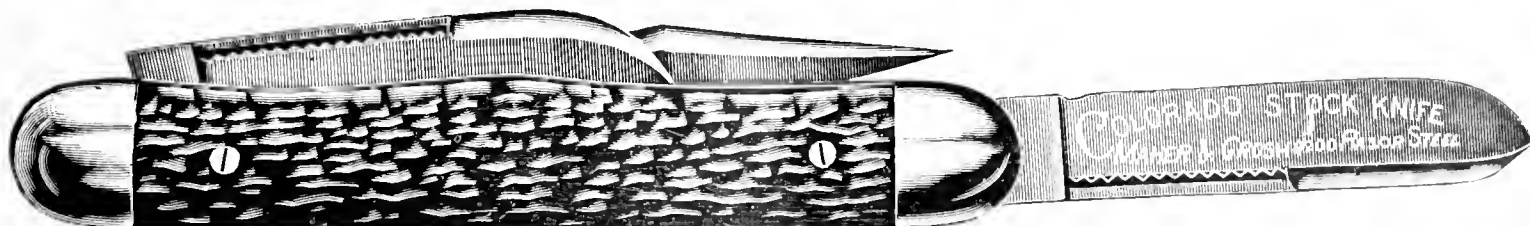


EVERY SATURDAY

Advertising Space, \$1 Per Inch Subscription, \$1 Per Annum  
Under this title we publish the most reliable, progressive and up-to-date  
trade paper in the country, with departments covering the Nursery, Florist,  
Seed Trade and Allied Industries. ¶ With a paid up subscription and distribu-  
tion list of 9000 copies, nearly every copy of which is to men in business for  
themselves the worth of our columns will be readily appreciated. ¶ The editor  
of our Nursery Department is and has been for years, JOSEPH MEEHAN of  
Philadelphia.

For sample copy, discounts, etc., address

THE FLORISTS' EXCHANGE, P. O. Box 1697, New York City



## The Celebrated COLORADO STOCK KNIFE No. TB. Price \$1.10 Postpaid. 6 for \$5.50

For 35 years this knife has been our big seller. It is used as a stock knife, the open blade being fine for spaying animals; it is equally fine in  
a nursery, for the open blade is a budding blade, and the short, closed blade is an excellent grafting blade. The Maher & Grosh Knives are  
used in almost every nursery in the United States. They are hand-forged from razor-steel and warranted. All-steel Pruning Shears \$1.00. Nursery Pruner 50c. Pocket  
Pruner 60c. Pocket Budder 35c. Pruning Saw \$1.00. ¶ Nursery and Florists Propagating Knife, white handle, 50c. All Postpaid. Send for our 12-Page Nursery Cata-  
logue. We solicit direct trade.

90 A St.

**MAHER & GROSH CO.**

Toledo, Ohio

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We are now in our New Factory with every facility for the prompt and proper handling of your business. Shipping advantages of five railroads

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IRON OR COPPER WIRED

**Printed on Both Sides - No Extra Cost**

We are the originators of the two-sided printed label. Our new blank label has proven a great success. It cannot fall off. Painted or plain

ROW MARKERS

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POT LABELS

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Cloth and Paper

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TAG SPECIALTIES

DEADLOCK HOOKS  
TAG ENVELOPES  
TAG FASTENERS

LETTER HEADS  
ENVELOPES  
ORDER BLANKS

Get our prices on your wood label, shipping tag, and printing requirements before placing your order. Write for samples and prices stating quantity desired.

**Allen-Bailey Tag Company, Inc.**

GENERAL PRINTERS

Caledonia,

New York

## FOREST TREES FRUIT STOCKS



SHIPMENTS OF OVER 200  
MILLION OF TREES  
ANNUALLY

LARGEST  
**FOREST TREE  
NURSERIES**  
IN EUROPE

Please write for Catalogue and  
Forest Planter's Guide to our  
American Representative:

**OTTO HEINECKEN**

Whitehall Bldg. 17 Battery Place  
NEW YORK

**J. HEINS' SONS**

HALSTENBEK No. 152

Near HAMBURG, GERMANY

## Tree Protection

SCALINE will protect them all seasons of the year.

SCALINE is an oil and sulphur composition, a scalcicide, insecticide and fungicide combined—three in one—and it will destroy San Jose, oyster shell, cottony maple, tulip scale, aphids, red spider, thrips, mealy bug and all sap sucking insects.

SCALINE is composed of a high grade petroleum oil and the properties of our fungicide Fungine, thus making it equally effective for the control of various fungi.

SCALINE is used at the strength of one part to twenty parts water for scale; one part to fifty parts for other sap sucking insects. It is readily soluble in water, requires no mixing, and containing no sediment can be applied through the finest spray nozzle.

SCALINE may be used as safely in the growing as in the dormant season. It is an all year round spraying material.

Gallon, \$1.50

Fifty gallons, \$37.50

Ten gallons, \$10

We believe that in SCALINE we have one of the best spraying materials on the market today for general spraying of trees, shrubs and hardy plants. We feel confident that a trial would make you a regular user of this product.

## Aphine Manufacturing Co.

M. C. EBEL, General Manager

Manufacturers of Agricultural Chemicals

MADISON, N. J.

"APHINE"  
Insecticide

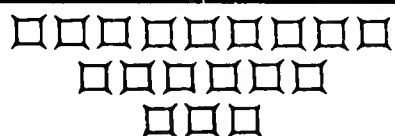
"FUNGINE"  
Fungicide

"VERMINE"  
Vermicide

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# Willis Nurseries

## A. Willis & Co., Ottawa, Kansas.



Offer to the trade Apple, Peach,  
Apple Seedlings, Forest  
Tree Seedlings

General Assortment of  
Nursery Stock

You Will be Pleased With Our Stock and  
We Solicit Your Orders

# Barberry Thunbergii,

# Viburnum Plicatum,

# Weigela Eva Rathka,

Are Samples of a Few of the  
Good Things in Shrubbery  
That We Have Growing in  
Quantities and Growing Well.

Orders Booked Now for Fall  
Delivery.

Write now for Our List.

The Conard & Jones Co.  
West Grove, Penna.

# RAFFIA! RAFFIA!

BALE LOTS OR LESS

**B**UDDING TIME will soon be here. You will want  
Raffia—Good Raffia—the poor kind can be bought  
easier and for less money. But there's no good  
reason why you should buy promiscuous brands of uncer-  
tain quality when you can buy the **Red Star Brand**—  
the nurserymen's grade at our present prices. We also have  
a limited quantity of **XX Superior**, an extra fine East  
Coast quality at a little higher price, and for those who  
consider price rather than quality we offer **Arrow Brand**  
an ordinary grade of Raffia at lower price.

**Colored Raffia**, is now being used by many nursery-  
men to designate the caliper of trees—try some, you'll  
find it very useful for many purposes.

Write us for prices, stating brand you prefer. Samples  
free on request when you state brand and approximate  
quantity required.

Orders filled same day as received

McHUTCHISON & CO.

THE IMPORT HOUSE

17 Murray St., NEW YORK

# L. R. Taylor & Sons

## TOPEKA, KANSAS



Apple Trees, Two-Year

We have an **EXTRA FINE**  
lot of two-year-apple, and  
are prepared to make low  
prices for early orders.

Our usual plant of apple  
seedlings, pear seedlings,  
catalpa seedlings.

Also peach, cherry, plum  
and apricot.

## Fumigation with Hydrocyanic Acid Gas Generated From Cyanide <sup>98</sup>/<sub>99</sub>%

Is the only positive eradicator of San Jose Scale and other Insect Pests. Endorsed by all agricultural experiment stations.

Manufactured by

The Roessler & Hasslacher Chemical Co.  
100 WILLIAM ST., NEW YORK

## FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER *for Spring 1913*

GRAPE VINES—One and two years old. Varieties largely Moore's Early, Concord and Niagara. Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all cleaned and guaranteed first class.

Correspondence solicited. Price list upon request.

**CHAS. M. PETERS**

P. O. Address, Salisbury, Wicomico County, Md., R. F. C. 3  
Long Distance Phone and Telegraph, Salisbury, Md.

## WE OFFER

For SPRING 1913

Grape Vines, Currants and Gooseberries  
in all varieties and Grades

—also—

Grape and Currant Cuttings and Light  
Grade of Vines for Lining Out  
in Nursery Rows

WRITE FOR PRICES

F. E. SCHIFFERLI, Fredonia, N. Y.

## Vincennes Nurseries

Vincennes, Ind.

W. C. REED, Prop.

We are pleased to offer for Spring, 1913,

CHERRY—Two Year. All leading sour varieties.

CHERRY—One Year. General list leading sorts sour and sweets.

PEACH—One Year. 30 varieties.

APPLE—Two Year. All grades.

APPLE—One Year. Cut Backs very strong.

SILVER MAPLE. All grades.

Can furnish the above in Carload Lots or less. Also Pear, Plum, Quince, Compass Cherry, Currants, Gooseberry, Catalpa Speciosa and ornamentals in good assortment.

Please submit list of wants for prices. Personal inspection invited.

## "Everything for the Nurseryman"

### COLORED PLATES

All kinds. Plate Books, Folios, Maps, Cards,  
Printed Forms, Circulars, and

PROMPT SERVICE

**Rochester Lithographing Co.**

22 Elizabeth St., Rochester, N. Y.

We are now ready to quote lowest prices on  
**FRUIT, SHADE AND ORNAMENTAL  
TREES, SHRUBS, EVERGREENS,  
VINES and HERBACEOUS  
PLANTS**

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready end of September.

**The Willadean Nurseries**

SPARTA, KY.

## Westminster Nursery

Westminster, Md.

J. E. STONER, Prop.

We are pleased to offer for Fall 1913

Peach Trees, 1 year, 35 varieties.

Apple, 2 year, all grades

Apple, 1 year mostly buds

Cherries, 2 year, general list sour

Pear, 1 and 2 year, all grades

Asparagus, 2 year

Can furnish the above in carload lots or less, also

Grapes, Currants, Gooseberries, Catalpa Speciosa, Carolina Poplar  
Ornamentals in good assortment

WE WOULD MAKE VERY ATTRACTIVE PRICES ON PEACH  
TREES IN CARLOAD LOTS.

Please submit list of wants for prices, as we will not attend the convention at Portland during June.

We have a splendid stock of

## Grape Vines

and other small fruit plants for the Nursery  
trade, graded up to the highest standard  
and sure to please you.

Give us a trial order, send in your list now for quotations

**WILLETT & WHELOCK**

North Collins, N. Y.



# English Nursery Stock=Manetti Rose Stocks

Orders booked now for Fall delivery. Regular quantities supplied to the States.

## SPECIAL PRICES THIS YEAR

1 year splendidly rooted stocks from sandy loam, none better imported. Also an extensive stock of **HARDY RHODODENDRONS**, best known American kinds, especially grown for the Trade.

**AZALEAS** and other American plants. **HARDY CONIFERS**, **ORNAMENTALS** and **SHADE TREES**, **ROSES**, **FRUIT TREES** and **FRUIT TREE STOCKS**, **TRANSPLANTED FOREST TREES**, Etc., Etc.

Always ready to give the best attention to orders and enquiries.

## THIRTY YEARS' SUCCESSFUL TRADING IN THE STATES

No Agents. Write direct for Wholesale Catalogue to

**WALTER CHARLES SLOCOCK**, Goldsworth Nurseries, WOKING, Surrey, England

Half an hours rail from London by L. & S. W. R. Main Southampton Line

Established 1780

## Andre Leroy Nurseries

H Brault, Director

Angers, France

**fruit Stocks, Ornamentals  
Evergreens**

The Standard of Reliability

Andre L. Causse

105 Hudson St., New York

Sole Agent since 1883.

## V.G'S. VERY GOOD

Hardy Nursery Stock such as **AZALEAS**, **BUXUS**, **CONIFERS**, **EVERGREENS**, **PAEONIAS**, **MAGNOLIAS**, **RHODODENDRONS**, **ROSES**, ETC., ETC., offered by

**G. W. VAN GELDEREN**

WHOLESALE NURSERIES

Ask for Catalogue

**BOSKOOP, HOLLAND**

## Wick Hathaway's BERRY PLANT NURSERY

Dept. 3

MADISON, OHIO

*Tips, Slips and Transplants—All the Best, Up-to-Date Varieties*

**The most extensive, exclusive Berry Plant Nursery in Ohio**

I grow St. Regis, Herbert, Perfection, Early King, Eaton, Cuthbert, Marlboro. (Reds)—Golden Queen, Columbian, Haymaker. (Yellow and purple)—Plum Farmer, Kansas, Gregg, Cumberland. Blacks—in raspberry plants and berries, each by the acre. Also the leading varieties of **Blackberry**, **Dewberry**, **Gooseberry**, **Currants** and **Grapes**. Also the most of one whole farm devoted to forty varieties of **Strawberries**, including Wick Hathaway's **Hundred Dollar** and **Money Maker**—two of the best big, heavy yielders known to the strawberry world. You may have seen or heard of my attractive exhibit of **Everbearing Red Raspberries** at the new Northern Ohio Fair at Painesville, Ohio, September 1912. I have these by the acre bearing berries for daily market until cut down by freezing weather. You'll want some of these. Prices right for good plants. No Cheap John stuff tolerated.

I issue an annual retail catalogue—it's free for the asking, as my catalogues have been for the past thirty odd years.

I solicit a share of the wholesale trade for my plants of quality at a mutual price. Write your wants early to HATHAWAY (Wick B.), the man helping to keep Ohio on the map. See address at top.

ESTABLISHED 1893

## THE NATIONAL NURSERYMAN

INCORPORATED 1902

**THE OFFICIAL ORGAN OF THE AMERICAN ASSOCIATION OF NURSERYMEN**

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all the leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.00 per year in advance

FOREIGN SUBSCRIPTIONS \$1.50 per year in advance

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**THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated**

218 LIVINGSTON BLDG., ROCHESTER, N. Y.

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# ORNAMENTAL STOCKS

NURSERIES  
420 ACRES

## WE GROW

FRUIT TREE STOCKS—All Sizes.  
300 varieties of Conifers, 1 to 4 years old.  
1200 varieties of Ornamental Trees and Shrubs, 1 to 3 years old.  
1600 varieties of New and Old Ornamental Trees & Shrubs in all Sizes.  
250 varieties of Climbing Plants.  
400 varieties of Conifers, 1 to 4 feet high.  
400 varieties of Perennials.  
800 varieties of New and Old Roses.

We Have No Agents.  
Write direct to us and  
ask for **WHOLESALE  
CATALOGUES**

TRANSON BROS. & D. DAUVESSE'S NURSERIES,

16 Route d'Olivet

**BARBIER and CO., Successors,**

Orleans, France



Circular of Larger Sizes upon Request

## EVER NEED DUPLICATES

of Form Letters, Price Lists, Bills, Invoices, Drawings, Menus, Reports,—Anything?

Then take advantage of our offer of

**10 DAYS' TRIAL WITHOUT DEPOSIT**

and become one of thousands of satisfied customers who all agree that

## DAUS' IMPROVED TIP TOP DUPLICATOR

is the simplest, easiest and quickest method of duplicating on the market. Our negative rolls now have our new "Dausco" Oiled Parchment Back, giving additional strength and efficiency. 100 copies from Penwritten and 50 copies from Typewritten Original.

If you have tried other duplicators without success, you will be more than pleased with ours.

Complete Duplicator, cap size, (prints  $8\frac{3}{4}$  x 13 inches). Price \$7.50, **\$5.00**  
less special discount of  $33\frac{1}{3}$  per cent, net .....

FELIX A. G. DAUS DUPLICATOR CO.

Daus Building, 111 John Street, New York

## Raffia

Red Star Brand Raffia is the most satisfactory brand on the market. It is a combination of a guaranteed high class quality at a reasonable price. We can also supply other brands of various grades and prices. Send for our Price List.

## Fruit Seeds

We will have our usual supply: Mazzard and Mahaleb Cherry. French, Japan, and Kieffer Pear. Myrobalan Plum. French Crab Apple and Quince Seeds to offer this year. Orders now being booked for Mazzard Seed. All orders for fruit seed should be placed early.

## Tree Seeds

A most complete assortment of Evergreen and Deciduous Tree and Shrub Goods. All seeds fresh and of good germinating quality. New catalogue ready September 1st.

## Bamboo Canes for Staking Trees

The best kind of stakes for the purpose. Straight, tough, and durable.—Write for prices,—supply limited.

## Small Stock for Lining Out

Every Spring we offer about 200 varieties of small ornamental trees, shrubs, and vines, suitable for lining out in Nursery rows. We only offer this stock for Spring delivery. Price List issued January 1st. While we usually have this stock in large quantities of each variety, it often happens that half the varieties are exhausted immediately after list is sent out. We are booking orders now. Let us know your wants!

## Ornamental Nursery Stock

We have 225 acres devoted to the proper growing of Ornamental Nursery Stock and can offer you first class stock at a reasonable price in small or large quantities, and in a most complete list of varieties. Fall Trade List ready about September.

## THOMAS MEEHAN & SONS

Wholesale Nurserymen and Seedsmen

DRESHER

PENNSYLVANIA

# H. M. HARDYZER

## Boskoop, Holland

Wholesale Grower and Exporter of High-Grade Nursery Stock

Offers to the Trade for fall and Spring Delivery

Abies varieties

Acer Polymorphum

Andromedas in varieties

Araucaria Imbricata

Aucubas with and without berries

Azaleas hardy and forcing

Baby Ramblers (Polyantha Roses)

**Boxwood, pyramids, bushes,  
globes, squares and fancy  
shapes**

Clematis, pot and field grown

Climbing plants

Fruit trees, trained and seedlings

Herbaceous plants

Hollies in varieties

Hortensias

Hydrangea paniculata grandiflora

Japanese maples

**Juniperus, assorted varieties**

the largest and most complete stock

Kalmias assorted

Laurocerasus

Lilacs, pot grown for forcing

Lilacs, field grown

Magnolias, in varieties

Ornamental and Weeping trees

Ornamental Shrubs

**Paeonia (Herbaceous)**

Paeonia arborea (Tree Paeonias)

Phlox decussata

Phlox suffruticosa

Picea's assorted varieties

Plants ready for forcing

Plants for mail order trade and lining out

Rambler (Polyantha Roses)

Retinospora varieties

**Rhododendrons, hardy and  
forcing** our great specialty

**Roses, bushes, standards and  
climbers,** over 500 varieties

Skimmia Japonica with berries

Taxus (Yews) varieties

Thuias varieties

Tsuga canadensis (Hemlock Spruce)

If you are in the market for Superior Trees, let us figure with you

**Rhododendrons - Roses - Azaleas - Etc.**



**Grown on Contract**





# "The Trees That Grow the Fruit That Sells"

are the trees that are grown *right* from the day the stocks are budded. Every tree that comes from Harrison's Nurseries is Harrison grown—we sell no stock that is not raised on our own place.

You will need fruit trees for fall orders, but we want you to remember that we have Ornamentals, too—Maples, Elms, Ash, Linden, Plane, Blue Spruce, Juniper, Elder. We have a big stock of Privet, the great American hedge plant, and can make special prices for fall delivery.

Write or wire for special prices on stock in this list.



A Ray Peach Tree at Berlin.

## SURPLUS LIST

### APPLES—1 year budded

American Golden Russett.....	200
Baldwin.....	100000
Ben Davis.....	3000
Carolina Red June.....	400
Chenango (Strawberry).....	400
Dominie.....	300
Duchess.....	15000
Early Harvest.....	1500
Early Strawberry.....	250
Fallawater.....	600
Fall Pippin.....	500
Fameuse.....	1000
Golden Beauty.....	400
Golden Sweet.....	150
Gravenstein.....	5000
Grimes' Golden.....	20000
Hubbardston.....	1500
Hyslop.....	600
Jonathan.....	25000
King.....	2000
Maiden Blush.....	1000
Mammoth Black Twig.....	60000
Martha.....	250
McIntosh Red.....	15000
Missouri Pippin.....	150
Myrick.....	200
Nero.....	2000
Northern Spy.....	3000
North Western Greening.....	1500
Opalescent.....	400
Paradise Winter Sweet.....	1500
Rambo.....	1200
Red Astrachan.....	5000
Rhode Island Greening.....	4000
Rome Beauty.....	3000
Smith's Cider.....	500
Smokehouse.....	1500
Spitzenburg.....	1200
Starr.....	2000
Stark.....	5000
Stayman's Winesap.....	90000
Summer Hagloe.....	1000
Sweet Bough.....	600
Transcendent.....	600
Wealthy.....	12000
Wm. Early Red.....	12000
Winesap.....	10000
Winter Banana.....	2000
Wolf River.....	5000
Yellow Belleflower.....	250
Yellow Transparent.....	12000
York Imperial.....	8000

### APPLES—2 year budded

A. G. Russett.....	100
Alexander.....	500
Baldwin.....	9000

### APPLES—2 year budded—Con't

Ben Davis.....	5000
Bismark.....	100
Benoni.....	15
Belleflower.....	100
Chenango Strawberry.....	100
Coffelt Beauty.....	100
Cooper's Market.....	15
Carthouse.....	100
Duchess.....	150
Dominie.....	150
Ensee.....	100
Early Strawberry.....	100
Early Colton.....	100
Early Harvest.....	1200
Fanny.....	15
Fallawater.....	500
Fourth of July.....	500
Golden Beauty.....	300
Gano.....	4000
Gravenstein.....	1000
Grimes' Golden.....	150
Hyslop.....	150
Jefferies.....	100
Jonathan.....	3000
King.....	700
Lawyer.....	75
Lankford.....	50
Longfield.....	100
Limbortwig.....	100
Missouri Pippin.....	150
Martha.....	100
Myrick.....	100
Mann.....	100
Nero.....	1000
North Western Greening.....	1000
Paradise Winter Sweet.....	400
Pewaukee.....	100
Porter.....	100
Rome Beauty.....	100
Red Astrachan.....	3000
Rawles Janet.....	100
Rolfe.....	100
Rambo.....	300
Red June.....	100
Spitzenburg.....	200
Sweet Bough.....	300
Smith Cider.....	100
Scott's Winter.....	100
Salome.....	100
Springdale.....	100
Stark.....	500
Stayman's Winesap.....	15000
Transcendent.....	1200
Talman Sweet.....	500
Winter Banana.....	150
Walbridge.....	100
Wolf River.....	300

### APPLES—2 year budded—Con't

Winesap.....	7500
Wealthy.....	2000
York Imperial.....	20000
Yellow Transparent.....	7500

### APPLES—3 year budded

York Imperial.....	10000
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### APPLES—2 year grafts

Baldwin.....	7000
Stayman's Winesap.....	7000
Winesap.....	500
York Imperial.....	7000

### PEACH—1 year budded

Admiral Dewey.....	200
Alexander.....	250
Belle of Georgia.....	23000
Bilyeu's Late October.....	3000
Bray's Rare Ripe.....	250
Capt. Ede.....	1000
Carman.....	30000
Chair's Choice.....	9000
Champion.....	3500
Chinese Cling.....	250
Crawford's Early.....	4000
Crawford's Late.....	21000
Connett's So. Early.....	250
Crosby.....	1000
Edmont Beauty.....	1000
Elberta.....	45000
Engles' Mammoth.....	600
Fitzgerald.....	900
Foster.....	2000
Ford's Late White.....	1100
Fox Seedling.....	2500
Francis.....	1500
Geary's Hold On.....	3000
Globe.....	750
Gold Drop.....	150
Greensboro.....	3750
Harrison Cling.....	300
Hiley.....	1300
Iron Mountain.....	1600
Jackson Cling.....	150
Kalamazoo.....	2000
Krummell's October.....	700
Late Elberta.....	250
Levy's Late.....	1000
Mamie Ross.....	700
Marshall.....	200
Matthew's Beauty.....	250
Mayflower.....	2000
McCollister.....	300
Miss Lola.....	100
Moore's Favorite.....	1250
Mountain Rose.....	5000

### PEACH—1 year budded—Con't

New Prolific.....	1500
Niagara.....	2500
Old Mixon Free.....	5000
Picquet's Late.....	250
Prize.....	250
Reeve's Favorite.....	6500
Salway.....	4000
Slappey.....	2000
Smock.....	4500
Sneed.....	150
Stephen's Rare Ripe.....	1250
Stinson's October.....	200
Stump.....	3000
Sunrise Cling.....	150
Triumph.....	600
Waddell.....	900
Walker's V. Free.....	250
White Heath Cling.....	1500
Wilkin's Cling.....	1250
Willett.....	225
Wonderful.....	4000
Yellow St. John.....	6000

### PEARS—1 year budded

Bartlett.....	6000
Dwarf Bartlett.....	1500
Kieffer.....	25000

### PEARS—2 year budded

Kieffer.....	4000
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### PEARS—3 year budded

Kieffer.....	8000
Bartlett.....	3000

### PEARS—3 year dwarf

Bartlett.....	1500
---------------	------

### CHERRY—1 year budded

Early Richmond.....	1000
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### CHERRY—2 year budded

Early Richmond.....	3000
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### GRAPES

Concord, 3 yrs., extra heavy.....	5000
Concord, 2 yrs.....	20000
Moore's Early, 2 yrs.....	20000
Niagara, 2 yrs.....	2000

### ASPARAGUS—1 year

Donald's Elmira.....	5000
Giant Argenteuil.....	5000
Barr's Mammoth.....	5000
Conover's Colossal.....	5000
Palmetto.....	5000

**Harrison's Nurseries**  
J.G. HARRISON & SONS PROPRIETORS  
BERLIN MARYLAND

Designed and written by The McFarland Publicity Service, Harrisburg, Pa.  
W. F. HUMPHREY, PRINTER, GENEVA, N. Y.



# THE NATIONAL NURSERYMAN



JULY, 1913

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

## THE MONROE NURSERY

Established 1847.

OFFER A GENERAL LINE OF

### Choice Nursery Stock

## CHERRY and STD. PEAR

of Extra Fine Quality.

If you are in the market for superior trees write  
us for prices.

**I. E. Ilgenfritz' Sons Co.**  
MONROE, MICH.

## EVERGREENS

### OUR LEADING SPECIALTY

RHODODENDRONS, HEMLOCKS, WHITE  
PINES, BOX BUSH. A general collection  
of specimen ornamentals.

ALSO

NORWAY MAPLES, PIN OAKS, IBOTA  
PRIVET, SPIRAEA VAN HOUTTEI  
by the thousand.

## Andorra Nurseries,

WM. WARNER HARPER, Prop.

CHESTNUT HILL, PHILA., PA.

## MOUNT ARBOR NURSERIES

E. S. WELCH, Proprietor

136 Center St., Shenandoah, Iowa

Make a Specialty of a Complete Line of High Quality Nursery  
Stock for **WHOLESALE TRADE**

Large Stock of Apple and Crab, Peach, Plum, Cherry, Currants,  
Gooseberries, Blackberries, Root Cutting Plants.

ORNAMENTALS—Elm, American White; Maple, Silver  
Leaved; Privet, California and Ibota.

ROSES—Hybrid Perpetuals, Moss and Ramblers.

FOREST TREE SEEDLINGS

APPLE SEEDLINGS

APPLE GRAFTS, made to order

Always pleased to quote your wants

CORRESPONDENCE AND INSPECTION INVITED

## THE JEWELL NURSERY CO.

*Wholesale Nurserymen*

LAKE CITY, MINNESOTA

Established 1868

1500 Acres

Everything in the line of Nursery Stock  
suited to Northern culture.

*Let us figure with you*

Now is the time to place your orders for

# Direct Importations

from European Nursery Centers

## FRENCH FRUIT STOCKS

Apple, Pear, Myrobolan, Mahaleb, Maz-zard Seedlings, Manetti, Multiflora and Quince stocks. Also full line of Orna-mentals for lining out, from Vincent Le-breton's Nurseries, Angers. Best pack-ing and grading. December or February shipment from France.

## Boskoop, Holland, Nursery Stock

Boxwood (pyramids, bushes, standards, ball-shape, etc). Roses, Tree Roses, Rho-dodendrons, Azaleas, Magnolias, Koster Blue Spruce, Evergreens, Hydrangea P. G., etc., etc., from Schaum & Van Tol, Boskoop.

## DECIDUOUS TREES

Norway and Schwedler Maples, Tili- as, Elms, Chestnuts, Oaks, Planes, Thorns, etc., etc., etc., straight stems and good roots, careful selection, best packing from Union Nurseries, Oudenbosch, Holland.

Besides representing the above firms as Sole American Agents, we import to order

## FROM JAPAN AND ENGLAND

English Manetti, Gooseberries 2 and 3-yr. (Whinham Industry, Whitesmith, etc.), Japanese Nursery Stock and Lilies.

**BAY TREES.** Standards, Pyramids and all shapes from Belgium, Fall or Spring shipment.

**RAFFIA.** Red Star Brand and four other grades; also dyed Raffia in 20 colors.

**WRITE US** for catalogs, special lists, etc., stating the class of stock you are interested in.

**SHIPPING.** We have our own Custom House Dept., with shipping connections at Havre, Hamburg, Rotterdam, Antwerp, Southampton, etc.

# McHutchison & Co.

17 Murray St.  
New York

The Import  
House

# SIMPSON

is the name of the men who grow the finest

## CHERRY

that can be produced by suitable soil, climate and expert knowledge.

Take a look at the stock or ask for a sample and be convinced of the extra quality of their

## TREES

PEACH

ST. PEAR

APPLE—1 year, 2 year and 3 year

AMERICANA PLUM ON PLUM

COMPASS CHERRY ON PLUM

# H.M. Simpson & Sons

VINCENNES, INDIANA

# Griffing Brothers

## Grow the Better Kind of Trees

**PECANS,** Budded or Grafted

**PLUMS** on Plum Roots

**PERSIMMONS,** Japanese

**FIGS,** Celestial, Magnolia, Brown Turkey varieties

**SCUPPERNONG, JAMES** and other Mus-cadine Grapes

**MULBERRIES,** well branched trees, free from Blight

**CAMPHOR** Trees

**CONIFERS** and Evergreen Trees

**PALMS** and Tropical Plants

**SATSUMA** Orange and other Citrus Fruits

Prices are Right

Trees are Right

# Griffing Brothers

JACKSONVILLE, FLORIDA  
MIAMI, FLORIDA

MOBILE, ALABAMA  
PORT ARTHUR, TEXAS



# NURSERYMEN AND FLORISTS

looking for stock can find largest assortment in the United States at the

## Painesville Nurseries

Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses, Vines and Plants, Grapes, Gooseberries, Small Fruits, Bulbs, Seeds, Palms and other tender Greenhouse Plants

Have large stock stored in frost-proof cellars that can be shipped at any time desired; switch from N. Y. C. lines direct into our packing house; can load without exposure. Unsurpassed facilities for handling orders large or small.

CATALOGS AND PRICE LISTS FREE



HARDY PERENNIAL BORDER

### A FEW SPECIALS WHILE THEY LAST :

STANDARD PEARS in assortment, DUCHESSE DWARF PEARS, BOURGEAT QUINCE,  
PRUNUS PISSARDI and TRILOBA, CUTHBERT and other Raspberries,  
CONCORD and other GRAPES

### OUR SPECIALTIES ARE

Roses, H. P. Moss, Ramblers, Climbers, etc., Peaches, Pears, Plums, Cherries,  
Ornamental Trees and Shrubs in car lots, Weeping Mulberries, Elm and Ash,  
Clematis, Ampelopsis, Paeonies, Hydrangeas, Bush and Tree Perennial Plants.

No Trouble to Price your List of Wants. 59 Years 1200 Acres 44 Greenhouses

## THE STORRS & HARRISON CO.

PAINESVILLE, OHIO

We are now in our New Factory with every facility for the prompt and proper handling of your business. Shipping advantages of five railroads

# WOOD LABELS

IRON OR COPPER WIRED

**Printed on Both Sides - No Extra Cost**

We are the originators of the two-sided printed label. Our new blank label has proven a great success. It cannot fall off. Painted or plain

ROW MARKERS

PLANT SUPPORTS

POT LABELS

DOWELS

## Cloth and Paper SHIPPING TAGS

TACK CARDS  
BOX MARKERS  
TIME CARDS

FILING CARDS  
MARKING TAGS  
MAILING CARDS  
TAG SPECIALTIES

DEADLOCK HOOKS  
TAG ENVELOPES  
TAG FASTENERS

LETTER HEADS  
ENVELOPES  
ORDER BLANKS

Get our prices on your wood label, shipping tag, and printing requirements before placing your order. Write for samples and prices stating quantity desired.

**Allen-Bailey Tag Company, Inc.**

GENERAL PRINTERS

Caledonia,

New York

### SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY  
PEACH PLUM

A Fine Block of  
Own Root Roses

ORNAMENTAL TREES SHRUBS  
BERRIES CLEMATIS  
EVERGREENS PEONIES PHLOX  
PYRAMIDAL and STANDARD  
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists  
and carload lots.

**W. & T. SMITH COMPANY**

GENEVA, N. Y.

63 Years

700 Acres

## Berckmans' Specimens

We never call a tree or plant a "specimen" until it really has earned the title. Our evergreens are transplanted, sheared and root-pruned, each one getting just the proper attention to make it a really handsome and serviceable specimen. It costs more to produce such, but it's worth it—to us, to you and to your customers.

### Your Trade Will Be Pleased With Them

We offer a select but limited stock at wholesale this year. We call attention to our Biotas—Aurea Nana, Aurea Conspicua, and Japonica Filiformis (see illustration); Retinospora, Thuya, and Juniper—all in popular sizes for the trade.

Our Deciduous Shrubs include Exochorda, Lilac, Spirea, Althaea, Deutzia, Philadelphus, and a very choice stock of Teas' Weeping Mulberry.

Broad-leaved Evergreens—Azalea Indica (Home-grown Plants) Magnolia Fuscata, Aucuba, Ligustrum, and English Laurel. Among our fruits, we direct particular attention to our clean, thrifty Peach Trees, of which we offer the the leading sorts.

### WRITE FOR PARTICULARS NOW

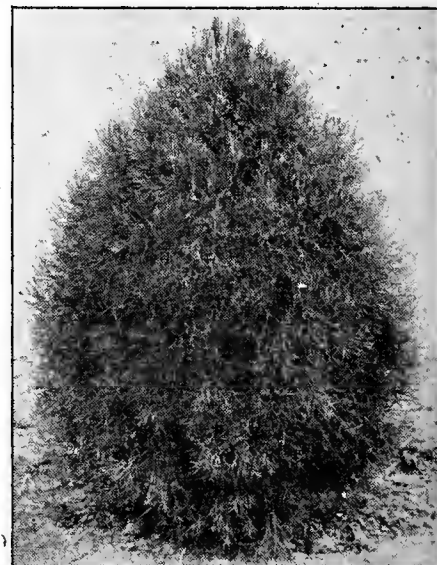
Tell us what you need, quantity, etc., and we will quote lowest price possible. Write early and get the best selections from our stock.

**P. J. Berckmans Co.**  
INCORPORATED

**Fruitland Nurseries**  
AUGUSTA, GEORGIA

Established 1856. Over 450 acres in  
Nursery.

CONIFERS  
BROAD-LEAVED  
EVERGREENS  
DECIDUOUS  
SHRUBS  
WEEPING  
MULBERRY  
PEACHES  
OTHER FRUITS



Biota Japonica Filiformis.

When writing to Advertisers please mention The National Nurseryman.

## The Best Tree Digger on Earth



Used and Recommended by Leading Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

**Stark Bros. Nursery & Orchards Co.**  
LOUISIANA, MO.

## Hill's Evergreens

Orders for Evergreens for August and September planting should be placed at once; we are now booking orders and will be glad to answer your questions. We specialize on Evergreen Seedlings and Transplants for Nurserymen's and Dealers' Use, Lining Out, etc., and grow millions each year from the seed—all leading varieties.

Visitors to the A. A. N. Convention at Boston who can stop at Dundee will be made welcome and will find our display well worth coming to see.

If you cannot come, do the next best—write for our Wholesale Catalog, free to you.

**The D. HILL NURSERY CO., Inc.**  
*Evergreen Specialists*

D. HILL, President Box 401, DUNDEE, ILLINOIS

**L. Spaeth** **BERLIN**  
Baumschulenweg  
GERMANY

**Largest Nurseries  
in Europe**

2000 ACRES

FOUNDED 1720

**HARDY TREES  
AND SHRUBS**

1. Our nurseries lie in a colder climate than the French, Dutch and English nurseries—
2. We grow all the stock we sell—
3. Moderate prices. Catalogs free—
4. When in Europe come and see our nurseries—

Have you seen and examined the quality and finish of our

**Rawhide Brand of Shipping  
Tags and Tree Labels**  
printed or plain, strung or wired?



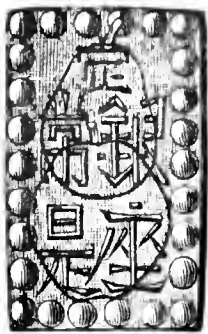
This stock is especially adapted to the most severe usage, being thoroughly waterproof & weather-proof. "Once used, always used."

Send for samples and prices. Our reference are the largest nursery men in the United States.

**The Denney Tag Co.**  
WEST CHESTER, PENNSYLVANIA



# Heikes --- Huntsville --- Trees



Huntsville  
Wholesale Nurseries

Huntsville, Ala.  
JESSIE S. MOSS, Prop.

We offer for Fall of 1913  
in large quantities as usual:

## SPECIALTIES

**APPLES**—Commercial varieties, one and two year, in large supply. As fine in quality as ever grown.  
**PEARS**—Kieffers, one and two years old. A much smaller crop than heretofore.  
**CHERRIES**—On Mazzard. Two year, Bing, Lambert, Napoleon, Black Tartarian.  
**CHERRIES**—On Mahaleb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.  
**PEACHES**—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.  
**ROSES**—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.  
**PRIVET**—Amoor River (South). Retains its foliage longer and holds its color better than California Privet.  
**PECAN SEEDLINGS**—Huntsville grown from selected nuts collected along the Gulf Coast. Thin shell.

See Price List for Particulars.

Address, HUNTSVILLE WHOLESALE NURSERIES  
HUNTSVILLE, ALA.

# Budding Time!



**RAFFIA.** How are you fixed? We can sell you from one to fifty bales and ship same day. We call it the "J&P Preferred" brand—clean, white, wide, long strands,—just what you want for budding; there's too much waste in short Raffia.

**BUDDING KNIVES.** Plenty on hand? Always a good plan to have a few extra ones—the boys will lose 'em, you know.

**FERTILIZER SOWER.** We sell a good one—pays for itself over again every summer—saves material, time and labor. Send for Price List of useful tools and things needed around the nursery.



Jackson & Perkins Co.  
NEWARK, NEW YORK

JUNE 1913

## BOBBINK & ATKINS

World's Choicest Nursery and Greenhouse Products

EVERGREENS and CONIFERS, in several hundred kinds and varieties	PALMS and BAY TREES by the thousands
ROSES, in all kinds and varieties	FRUIT TREES, home-grown, imported, DWARF and TRAINED
RHODODENDRONS, Hardy, ENGLISH HYBRIDS, Maximum and Catawbiense	SMALL FRUITS, in all kinds and varieties
BOXWOOD, in all shapes, forms and sizes	NUT TREES, profitable kinds
HARDY AZALEAS, in all colors and varieties)	OLD-FASHIONED, Hardy FLOWERING PLANTS, in thousands of kinds and varieties
HEDGE PLANTS, in all popular kinds	PAEONIAS, IRIS, PHLOX FERNS, and HARDY GRASSES
FLOWERING SHRUBS, in bush and standard forms in hundreds of kinds and varieties	KITCHEN HERBS and ROOTS
SHADE TREES, in hundreds of useful and attractive varieties	RUTHERFORD PARK LAWN GRASS SEED
MAGNOLIAS and other FLOWERING TREES	AUTUMN BULBS, Dutch, French and Japanese kinds
WEeping and STANDARD TREES, in many varieties	Interior and Exterior DECORATIVE PLANTS, in a large variety
JAPANESE MAPLES, in all varieties and colors	PLANT TUBS, in all shapes and sizes. Ask for special list
HARDY TRAILING VINES and CLIMBERS	VISITORS to our nurseries are always welcome
HARDY VINES and CLIMBERS in pots	SEND IN YOUR LISTS FOR QUOTATIONS
SPRING and SUMMER FLOWERING BULBS, ROOTS and PLANTS	

Nurserymen, Florists and Planters  
RUTHERFORD, N. J.

# BRIDGEPORT NURSERIES

OFFER A GENERAL ASSORTMENT  
OF NURSERY STOCK

Apple, Catalpa Speciosa Seedlings  
Shade and Ornamental Trees

IN LARGE QUANTITY

WRITE FOR PRICES

C. M. HOBBS & SONS  
BRIDGEPORT, IND.

## SEEDLING EVERGREENS

BY THE MILLIONS

Arbor Vitae	Jack Pine
Austrian Pine	Norway Spruce
Black Hill Spruce	Pinus Ponderosa
Colo. Blue Spruce	Pitch Pine
Concolor	Red Spruce
Douglas Spruce	Scotch Pine
Engelmanii Spruce	White Pine
European Larch	White Spruce

All sizes. Ask for prices.

SPECIAL QUOTATIONS ON LARGE ORDERS

Also the following **APPLES** in 1-2", 5-8" and 11-16" sizes at special prices:

Ben Davis, Duchess, Florence, Gano, Hibernial, Iowa Beauty, N. W. Greening, Okabena, Patten's Greening, Peerless, Peter, Pewaukee, Scott's Winter, Soulard, Strawberry Crab, Transcendent, University, Virginia, Wealthy, Whitney and Wolf River.

## SHERMAN NURSERY COMPANY

CHARLES CITY, IOWA

## Oriental Planes All Sizes From 1 $\frac{1}{4}$ to 2 $\frac{1}{2}$ inch Caliper

Double Flowering Peaches  
Double Flowering Japan  
Cherries, Weeping Japan  
Cherries, Flowering Apples  
Asparagus, strong 2 years  
Large and complete assortment of Flowering Shrubs

## Hoopes, Bro. & Thomas Co.

MAPLE AVENUE NURSERIES

WEST CHESTER, PA.

PHILADELPHIA

OFFICE:

222-3-4-5 Stephen Girard Bldg.,  
21 So. Twelfth Street

64TH YEAR

Baltimore Nurseries

## FRANKLIN DAVIS NURSERY COMPANY

Baltimore, Md.



We offer for Fall 1913 and Spring 1914:

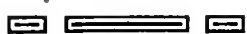
HIGH GRADE STOCK.

General Line:

PEACH, APPLE, PEAR, CHERRY, PLUM, CALIFORNIA PRIVET in 1 and 2 year fine stock.

ORIENTAL PLANES, NORWAY MAPLES, AMERICAN ELMS, SILVER MAPLES, HORSE CHESTNUTS, ETC.

Will make prices right on Peach and Privet in carload lots for early orders.



**SEND US YOUR LIST  
OF WANTS**

## Raffia

Red Star Brand Raffia is the most satisfactory brand on the market. Guaranteed high class quality at a reasonable price. We can also supply other brands. Send for our Price List.

## Fruit Seeds

We will have our usual supply: Mahaleb Cherry; French, Japan, and Kieffer Pear. Myrobalan Plum. French Crab Apple and Quince Seeds to offer this year. Mazzard Seeds are very scarce. All orders for fruit seeds should be placed early.

## Tree Seeds

A most complete assortment of Evergreen and Deciduous Tree and Shrub Seeds. All seeds fresh and of good germinating quality. New catalogue ready September 1st.

## Small Stock for Lining Out

We are booking orders now for Spring delivery. Let us know your wants.

## Ornamental Nursery Stock

Fall Trade List ready about September.

## THOMAS MEEHAN & SONS

Wholesale Nurserymen and Seedsmen

DRESHER

PENNSYLVANIA

35TH YEAR  
**Pan Handle Nurseries**

WE OFFER A COMPLETE ASSORTMENT OF NURSERY STOCK CONSISTING OF

Apple	Poplar Carolina	Ampelopsis
Pear	Poplar Volga	Roses
Plum	Elm American	Evergreens
Cherry	Sycamores	California Privet
Peach	Mountain Ash	Buxus
Grape	Althea	Weeping Trees
Currant	Hydrangea	Catalpa Seedlings
Gooseberry	Barberries	Black Locust
Small Fruits	Syringae	Fruit Tree
Maple Norway	Clematis	Catalpa Speciosa Seed.
Maple Schwedlers	Honey Suckle	Etc., Etc., Etc.
Maple Silver	Wistaria	

Our stock is well grown and graded. Prices are such that it will pay to investigate. Come and see us or write.

**J. K. HENBY & SON**  
GREENFIELD, IND.

**Currants. Apple Trees  
Ornamental Trees  
Ornamental Shrubs**

No better stock or finer assortment in the country.

*Prices are right*

Our Spring Trade List can be had for the asking.

**ARTHUR BRYANT & SON**  
PRINCETON, ILLINOIS

**WOOD LABELS**

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

**Dayton Fruit Tree Label Co.**  
South Canal St., Dayton, Ohio

**Ornamental Trees, Shrubs,  
Evergreens, Vines, Etc.**

HIGH  
GRADE



LARGE  
VARIETY

Correspondence solicited. Price list upon request.

**W. B. WHITTIER & CO.**  
South Framingham, Mass.

WE OFFER FOR FALL 1913:

**Norway Maple Silver Maple  
and Carolina Poplar**

IN CAR LOTS ALL SIZES  
GET OUR PRICES

**The Greenbrier Nursery Co., Inc.**  
GREENBRIER, TENNESSEE

**SCARFF'S PLANTS**  
equal to any  
on the market

Small Fruit Plants our specialty for 25 years. **100,000 Transplanted Raspberry,** Blackberry and Dewberry plants, fine for critical retail trade.

Currant, Gooseberries, Grapes, Horseradish, Asparagus, Rhubarb, etc. Hardwood cuttings and layers in large quantities. See our wholesale list before placing your order.

**W. N. SCARFF**  
NEW CARLISLE, OHIO

**HORTICULTURE**

A Magazine of Trade News and Cultural Information for the NURSERYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

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11 HAMILTON PLACE, BOSTON, MASS.



**400,000 Small Fruit Plants** in storage for Autumn trade, 1913. Blackberry root-cutting and sucker plants; Red, Purple and Black Raspberry; Downing Gooseberry, one year, No. 1; Dewberry; Asparagus two and three year roots; Rhubarb one, two and three year whole roots and divided. Let me quote you on your list of wants.

**P. D. BERRY, Dayton, Ohio**

When writing to Advertisers please mention The National Nurseryman



## Fumigation with Hydrocyanic Acid Gas Generated From Cyanide <sup>98</sup>/<sub>99</sub>%

Is the only positive eradicator of San Jose Scale and other Insect Pests. Endorsed by all agricultural experiment stations.

Manufactured by

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100 WILLIAM ST., NEW YORK

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FRUIT AND SEED FARMS

*OFFER for Fall 1913*

**GRAPE VINES**—One and two years old. Varieties largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all cleaned and guaranteed first class.

Correspondence solicited. Price list upon request.

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All kinds. Plate Books, Folios, Maps, Cards, Printed Forms, Circulars, and

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**Rochester Lithographing Co.**

22 Elizabeth St., Rochester, N. Y.

## Westminster Nursery

Westminster, Md.

J. E. STONER, Prop.

We are pleased to offer for Fall 1913

Peach Trees, 1 year, 35 varieties

Apple, 1 year mostly buds

Pear, 1 and 2 year, all grades

Apple, 2 year, all grades

Cherries, 2 year, general list sour

Asparagus, 2 year

Can furnish the above in carload lots or less, also

Grapes, Currants, Gooseberries, Catalpa Speciosa, Carolina Poplar  
Ornamentals in good assortment

**WE WOULD MAKE VERY ATTRACTIVE PRICES ON PEACH TREES IN CARLOAD LOTS.**

Please submit list of wants for prices. We have a few N. C. Natural Peach Seeds to offer. Crop 1912, also Crop 1913.

When writing to Advertisers please mention The National Nurseryman

## WE OFFER

For FALL 1913

Grape Vines, Currants and Gooseberries  
in all varieties and Grades

—also—

Grape and Currant Cuttings and Light  
Grade of Vines for Lining Out  
in Nursery Rows

WRITE FOR PRICES

F. E. SCHIFFERLI, Fredonia, N. Y.

## Vincennes Nurseries

Vincennes, Ind.

W. C. REED, Prop.

We are pleased to offer for Fall, 1913,

**CHERRY**—Two Year. All leading sour varieties.

**CHERRY**—One Year. General list leading sorts sour and sweets.

**PEACH**—One Year. 30 varieties.

**APPLE**—Two Year. All grades.

**APPLE**—One Year. Cut Backs very strong.

**SILVER MAPLE**. All grades.

Can furnish the above in Carload Lots or less. Also Pear, Plum, Quince, Compass Cherry, Currants, Gooseberry, Catalpa Speciosa and ornamentals in good assortment.

Please submit list of wants for prices. Personal inspection invited.

We are now ready to quote lowest prices on  
**FRUIT, SHADE AND ORNAMENTAL  
TREES, SHRUBS, EVERGREENS,  
VINES and HERBACEOUS  
PLANTS**

**FOREST TREE SEEDLINGS** we only have in limited supply this season, and would advise placing your orders early.

**TREE SEEDS** we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready end of September.

**The Willadean Nurseries**

SPARTA, KY.

We have a splendid stock of

## Grape Vines

and other small fruit plants for the Nursery  
trade, graded up to the highest standard  
and sure to please you.

Give us a trial order, send in your list now for quotations

**WILLETT & WHELOCK**

North Collins, N. Y.

# The Wonderful Kaw Valley



NOWHERE ELSE in the whole United States are Apple Seedlings grown so extensively and to such perfection as in the fertile Kaw Valley.

By proper cultivation, the soil is kept pulverized and forms a perfect dust mulch. Our cultivators start as soon as the rows show in the spring



and do not stop until the digging begins late in the fall. These seedling cultivators take two rows at a time. The tools are changed each time—first we use blades, then mokers, then small shovels, etc.,—changing each time over the field so as to stir every particle of soil. Each man will cultivate about ten acres per day.

## F. W. WATSON & COMPANY

*Apple and Pear Seedling Specialists, Topeka, Kansas*

# The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

Vol. XXI.

ROCHESTER, N. Y., JULY, 1913

No. 7

## THE STORY OF THE FLIGHT OF THE "NURSEYMEN'S SPECIAL" TO THE PORTLAND CONVENTION

It was but a mere handful of delegates who gathered at the New York Central Depot at Rochester to make the trip across the continent to attend the Convention of the American Association of Nurserymen at Portland, Oregon, but

As the train pulled out of the station a roll call was made and was answered by the following:

President Thomas B. Meehan, Philadelphia, Pa.

Albert F. Meehan, Philadelphia, Pa.



TWO-YEAR APPLE, WASHINGTON NURSERY CO., TOPPENISH, WASH., JUNE 11, 1913

what was lacking in quantity was more than made up in enthusiasm.

Marsden B. Fox, who has been in charge of the arrangements for the "Special" and who has been indefatigable in his efforts to secure a full car of delegates, was unfortunately prevented from making the trip on account of important business matters, or perhaps it was due to the fact that he had promised to the delegates three more lower berths and one more entire section than the car contained.

"Billy" Pitkin, "Eddie" Osborne, "Hod" Haeker, and "Foxey" and Orlando Harrison, were on hand to bid the party a safe journey.

Secretary John Hall, Rochester, N. Y.

Mr. and Mrs. L. J. Farmer, Pulaski, N. Y.

Joseph M. Charlton, Rochester, N. Y.

John B. Morey, Dansville, N. Y.

Ralph T. Oleott, Rochester, N. Y.

W. L. Hart, Fredonia, N. Y.

J. T. LeClare, New York City, N. Y.

G. Hale Harrison, Berlin, Md.

Geo. Perkins, Newark, N. Y.

John Ryken, Boskoop, Holland.

C. N. Burr, Manchester, Conn.



Mr. Burr was unable to make the trip throughout to Portland, but could not resist the temptation to go with the party as far as Chicago where he reluctantly left the "Special."

The party was augmented at Chicago by

Mr. and Mrs. Howard Davis, Baltimore, Md.

Miss Helen Davis, Baltimore, Md.

Mr. and Mrs. C. M. Peters, Salisbury, Md.

Mr. and Mrs. N. Levavasseur, Orleans, France.

John C. Chase, Derry, N. H.

Thomas Ilgenfritz, Monroe, Mich.

And again at St. Paul, by

L. C. Stark, Louisiana, Mo.

W. G. Campbell, St. Joseph, Mo.

and at Billings, Montana, by

Peter Youngers, Geneva, Nebraska,  
and T. J. Tighé, Billings, Montana.

Here also came the first surprise, ten crates of Oregon grown cherries, eight little baskets in each crate. Each basket contained a card marked

"A FORETASTE OF GOOD THINGS TO COME"

COMPLIMENTS

MILTON NURSERY CO.

A. MILLER & SONS

MILTON, OREGON

Cherries were eaten all day much to the disgust of the porter of the car who devoutly cursed the cherry stones which soon became thickly scattered, but the little band of travellers feared him not but continued to enjoy those cherries. The Miller boys were unanimously given a vote of thanks for their thoughtfulness.

As the "Special" pulled up at Missoula, Montana, it was boarded by Mr. and Mrs. C. F. Dallman of that city, who brought with them a magnificent box of carnations and another of mixed flowers. These were presented by them to the ladies in the car, though each gentleman was permitted to wear a carnation. The flowers were arranged in a large "vase" (the bucket belonging to the Pullman being utilized for the purpose.)

By this time the car was beginning to get crowded, but a berth was held open for Henry Chase, Huntsville, Alabama, who came aboard at Spokane.

On Sunday night, President Meehan, who was piloting the destinies of the car, announced that the car would be side tracked early next morning at Toppenish, and the men up by five o'clock, leave car at six and be ready for breakfast at seven, as on that day they would be the guests of the Washington Nursery Co. The ladies to have breakfast later and to join the men after a trip through the nurseries.

At eight o'clock next morning, after a comfortable breakfast at the Hotel, the men were rounded up in nine automobiles and made the rounds of the Washington Nurseries.

This is the largest nursery in Washington and one of the largest on the Coast. The stock showed by its vigor and healthy appearance that it had received thorough cultivation,

and that no effort had been spared to bring it up to the high standard set by the company for all of its stock.

One block of apple buds was particularly striking there being scarcely a miss in the stand.

This firm also makes a specialty of growing Apples, French and Japan Pear Seedling and several fine blocks of these were seen.

A few weeks ago one of the storage cellars was entirely destroyed by fire, but fortunately it happened after the spring packing was completed, hence, the loss was only on the building, which was fully covered by insurance.

After the rounds of the nurseries had been made, the party returned to the Hotel where the ladies of the party were taken in the automobiles, and the start was made for the long trip of the day.

Off through the valley, ever with the snow-capped peaks of Mt. Adams and Mt. Rainier before them, sped the machines, through such clouds of dust that it was scarcely possible at times to see the vast fields of orchards and alfalfa which stretched for miles on either side of the road. This valley contains some of the best alfalfa fields in the State.

A stop was made at the ranch of Mr. Harrah to see an artesian well some 510 feet deep and which when opened spouted a stream from an eight inch pipe some 30 feet in the air. The ranch of Mr. Harrah is beautifully located and is complete in every detail. The water from the artesian well is ample to irrigate the entire tract of 200 acres. The flow of the well is from 1500 to 2000 gallons per minute.

From here the route lay on through the valley, north through a part of the orchard belt adjacent to Wapato.

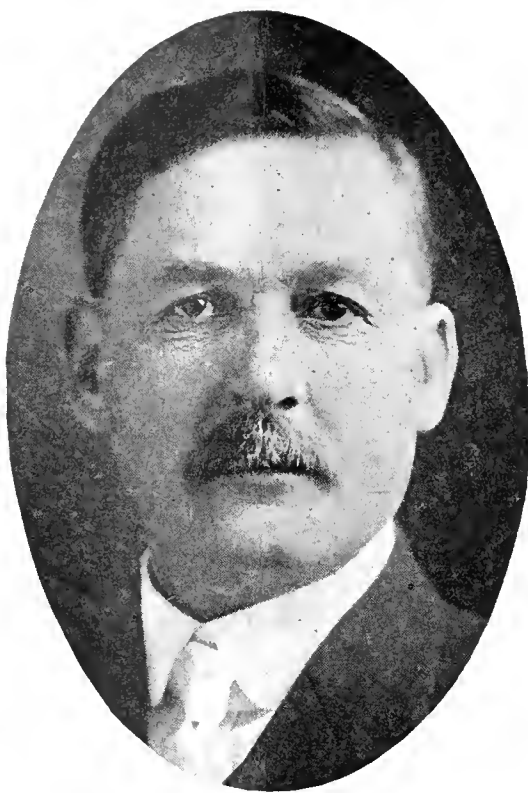
Here an informal lunch was provided by the church organizations of Wapato, and heartily enjoyed by the hungry travellers.

At its conclusion a few remarks were made by Mr. Wiggins vice-president of the Washington Nursery Co., and were responded to by President Meehan, who thanked the ladies of Wapato for the kindness which they had bestowed.

Entering the machines again, the journey was continued across the river, taking in the fruit lands above and below the Sunnyside Canal, visiting the head gate of the canal and spending several hours in the orchard district.

At the "Villa Country," the home of Mr. Walter M. Granger, another halt was made. Here strawberries and cream and cake were served and as the guests departed each was given a bag of cherries.

From here the return was made to Toppenish. But if the guests of the day thought that their entertainment had been completed, they were greatly mistaken. It seemed that it had but just commenced for upon their return at Toppenish, they were taken to a spacious hall as the guests of the Toppenish Commercial Club where a full dinner was served.



W. A. McDONALD  
President Washington Nursery Co.,  
Toppenish, Wash.

The travellers who had already been so bountifully supplied during the day with the good things of life, made a brave attempt to eat for the third time that day, but though the meal was tempting and the good ladies of Toppenish urged the good things upon the delegates, they could eat but sparingly, their capacity being limited.

At the conclusion of the meal, Mr. Allen, President of the Commercial Club was introduced who gave a brief sketch of the city, its foundation and progress after which Mr. John Hall, Secretary of the American Association of Nurserymen was called on, who extended the thanks of the travellers to the Washington Nursery Co., the Toppenish Commercial Club and all those who had extended courtesies during the day.

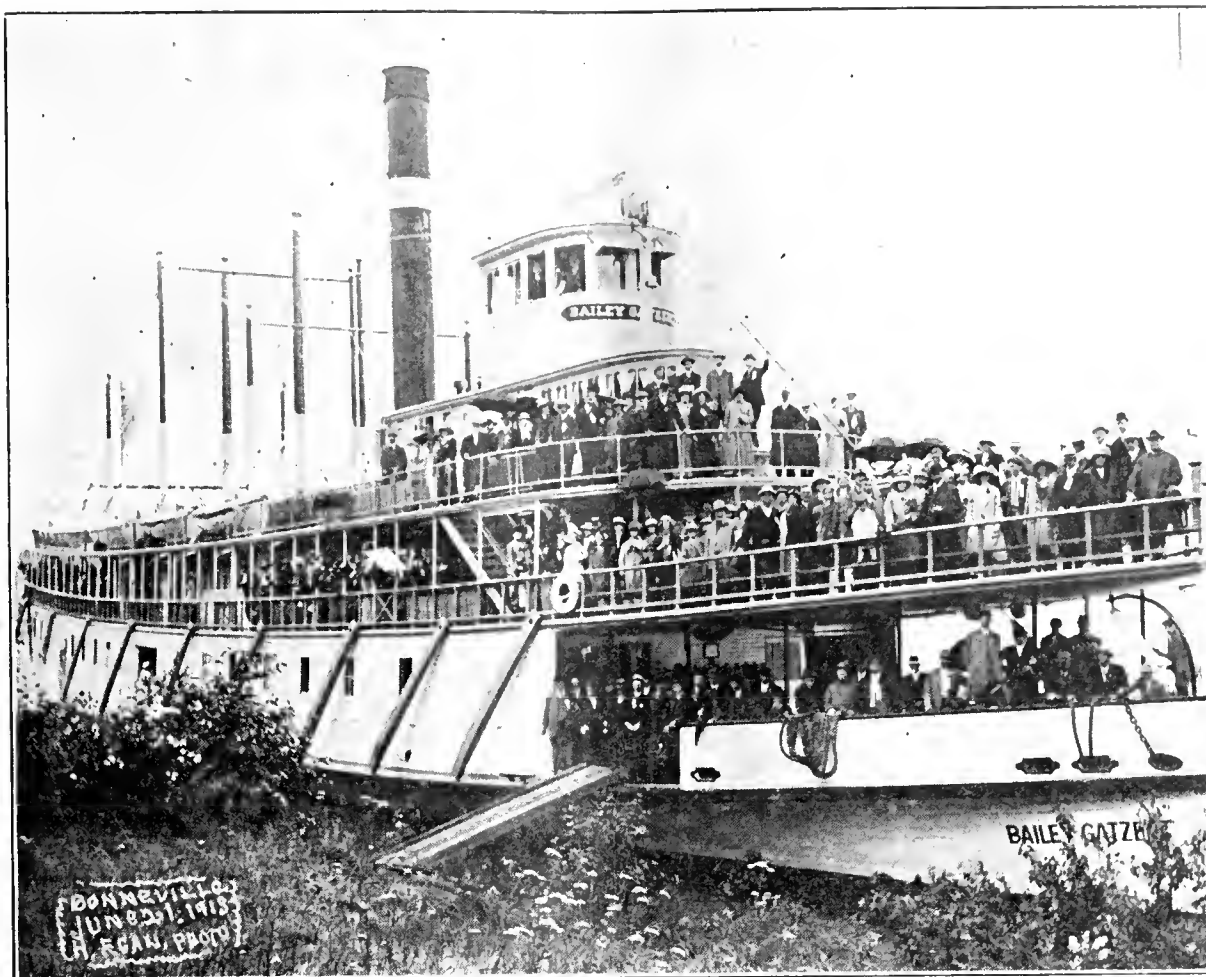
During the absence of the party, two large crates of cherries were put aboard the car by the Kennewick Commercial Club.

At six thirty the "Special" was attached to the Yakima local arriving at Yakima at 7:15 P. M., when as the

guests of the Commercial Club, automobiles were taken which conveyed the party for an hour and a half through the wonderful fruit districts and highest class orchard belts in the State of Washington, returning to the rooms of the Commercial Club where they were entertained for some time.

At 12:30 midnight the "Special" left for Seattle, arriving there at 8:30 A. M.

After a hurried trip by steamer down Puget Sound to the Navy Yard the party returned to the city where as guests of the Park Department and guided by the Superintendent Mr. J. Thompson, a trip was made in automobiles over a part of the beautiful Park system, returning to the depot just in time to catch the 4:10 P. M. train for Portland, at last completing the flight of the "Nurserymen's Special" from Rochester to Portland at 10:30 P. M., Tuesday night, every one tired but greatly pleased with their trip and gratified by the hearty welcome extended by all those with whom they had come in contact.



Delegates at Portland Convention on Board "S. S. Bailey Gatzert," on Excursion up the Columbia River, Saturday, June 21, 1913

## UP THE MAGNIFICENT COLUMBIA RIVER IN THE STEAMER "BAILEY GATZERT"

Saturday morning saw the members of the two Associations hurrying to the boat landing to take the ride up the Columbia River.

The steamboat "Bailey Gatzert" had been chartered for the occasion and was just comfortably filled, not over crowded.

A vocal male quartette and an orchestra furnished music during the day.

In the early morning the clouds were heavy predicting a rainy day but "Jack" Pilkington scouted the idea and guaranteed that soon the clouds would roll away and we would have a fine day. His predictions were not entirely fulfilled, but the effect of the clouds rolling up the side of the mountains will be a sight long to be remembered.

With tooting of whistles and clanging of gongs the boat pushed her way into the middle of the river, through the

great steel drawbridges down the Willamette then up the Columbia passing great log rafts in the river, and immense lumber mills on the shore and gradually on to where the mountains rose in majestic heights on either side.

The wonderful rock formation and the sides of these mountains clothed with rich green evergreens and the water at times trickling down the sides of rocky precipices, or again dashing over immense heights in great volume caused a feeling of awe and wonderment to fall on those who viewed it from the deck boat.

At noon a regular salmon dinner was provided and later in the afternoon a strawberry and cream lunch.

At one point the boat was tied up at a landing to give an opportunity to the visitors to inspect a large salmon



canning factory and as they departed each was given a small can of salmon to carry home as a souvenir of the trip.

Further on the nose of the boat was pushed into the rushing waters of the rapids then turned and allowed to slide down with the current until still waters were reached when the homeward trip followed and the travellers landed at the dock in Portland at 5:15 P. M.

This trip virtually closed the convention as many of the delegates immediately hurried to the depot homeward bound, or to visit other interesting points on the Pacific Coast, each and every one loud in their praises of the generous entertainment provided during their stay in the City.



DELEGATES TO THE PORTLAND CONVENTION GROUPED IN FRONT OF THE OFFICE OF THE OREGON NURSERY CO.  
ORENCO, OREGON, JUNE 20, 1913

### THE OUTING TO THE OREGON NURSERY CO'S. PLANT AT ORENCO, OREGON

At 11:30 Friday morning the business meeting of the American Association of Nurserymen came to a close and the crowds began to gather for the afternoon's entertainment which proved to be a trip to the plant of the Oregon Nursery Company at Orenco, a distance of sixteen miles from Portland.

Anticipating the pleasures in store for them a full crowd turned out, which was greatly increased by the addition of many local nurserymen with their wives and children, all realizing the value of the instruction to be derived from such a trip.

When the special electric train pulled out it was found to consist of four cars and carrying some two hundred people.

The ride to Orenco was very pleasant, a holiday was declared and everyone was filled to overflowing with the holiday spirit. All along the route one could not help to notice the luxuriant growth of the trees and evergreens while the "special" slowly moved its way along the hills above the city. From the car window you looked down on Portland and the Columbia River, while on the far side of the river the hills stretched away for miles, with a background of snow-capped ridges of mountains and Mt. Hood with all its splendor reflecting the bright rays of the sun com-



pleting a picture never to be forgotten by those who had traveled from the east and to whom these things were new.

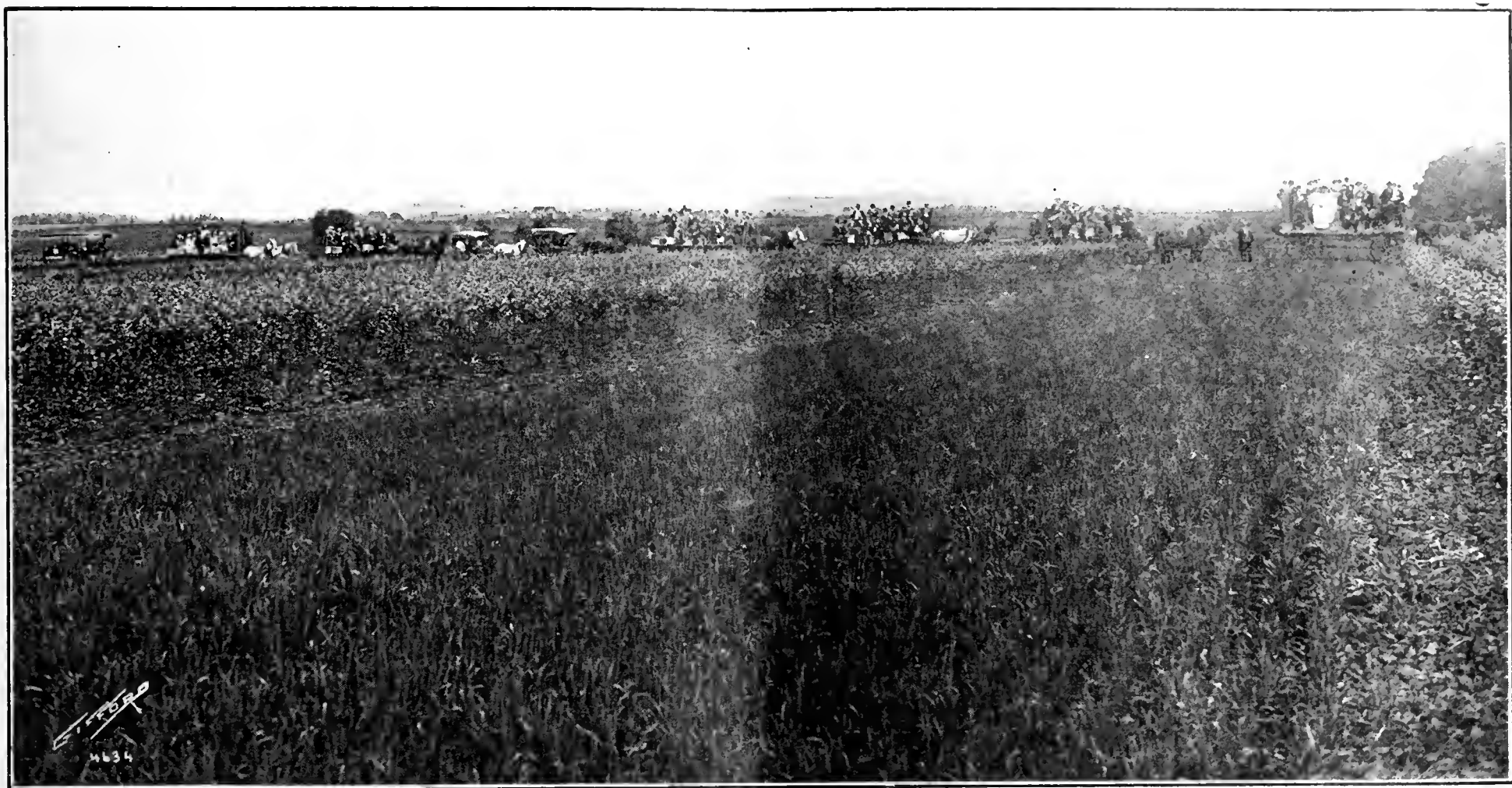
At Orenco we were met by the school children who proudly escorted us through their "school gardens," and it was one of which they might justly feel proud, for it was beautifully arranged, well planted, and well taken care of and so well cultivated that not a weed was to be found anywhere.

Orenco was founded some five years ago by the Oregon Nursery Company who have selected one of the finest spots in the northwest for the location of their nursery.

As the distance from Portland is too great to conveniently travel back and forth every day, the necessity of starting a

dent of the Pacific Coast Association of Nurserymen, P. A. Dix, Mrs. Harness, J. B. Morey, Hon. E. L. Smith, Peter Youngers, R. T. Olcott, President Young of the Oregon Electric Company, President-elect J. B. Pilkington of the American Association of Nurserymen and President-elect Richard Lautz of the Pacific Coast Association. Miss Edna Purdy, who has been connected with the Orenco Nursery Company for fourteen years, and M. McDonald, president of that company.

Having partaken of the good things both in the way of food and speeches we all climbed on the wagons, each wagon provided with a guide and conductor through the



DELEGATES TO THE PORTLAND CONVENTION IN TRIP OVER THE GROUNDS OF THE OREGON NURSERY CO.  
ORENCO, OREGON, JUNE 20, 1913

town was realized and as if by magic houses sprang into existence followed immediately by schools, churches, and hotels until now after only five years it is a very flourishing little city. But such is the spirit of the west.

Lunch was served in the immense packing shed covering two acres and which in this case served not only for packing trees, but also for packing people, as we were well packed with the good things with which the tables were so bountifully covered.

F. A. Wiggins of the Washington Nursery Company, acting as toastmaster, introduced Rev. Myron L. Boozer who not only acts as pastor of the church but also as mayor, City Council, president of the School Board and holds several other positions in the attractive little city, a veritable "Pooh Bah."

He told us of the wonderful growth of their little city of the plans and prospects for the future, and bid us a hearty welcome to it.

Mr. Wiggins then introduced other speakers including Geo. C. Roeding, Thos. B. Meehan, Albert Brownell, Presi-

nery, the extent of which was a revelation. Delighted as we were with the great blocks of trees and shrubs we were even more so with the evergreens, which were so regular and symmetrical and whose straight leaders and fine color far surpass our eastern stock.

Large blocks of fruit trees stretched away for acres and acres and one block, the guide informed us, contained four hundred and fifty thousand pear trees worked half on Japan and half on French stocks. A big block of one year peach was next brought into view, trees as fine as one could wish for and all well cultivated and cared for so as to produce the finest results.

Everything about the place showed that care and attention for which the Oregon Nursery Company is noted and reflected great credit on its management.

An interesting feature of the nursery was the experimental orchard conducted by the Oregon Nursery Company in conjunction with the Oregon Agricultural College. This orchard, planted this spring, contains in its two acres, four thousand trees all selected in different stages of hairy-

root, crown-gall, root-knot, wooly-aphis and other similar diseases common to apple trees. Its purpose is to prove that the diseases are not injurious to growth and fruiting qualities of the trees when planted in orchards.

Returning once more to our "special" the trip back to Portland was made, and it was a tired, but well pleased lot of people who abandoned the train and sought rest at the hotel that evening, all delighted with the good time they had had and the instructive lessons learned.

### THE TOUR OF THE CITY OF PORTLAND

One of the most interesting diversions accorded the delegates to the convention was the trip, in automobiles, around the city of Portland, which occurred on Wednesday afternoon. It required ten automobiles and three large "Sight Seeing" cars to convey the party. The procession was headed by Emil T. Mische, Superintendent of Parks, who was accompanied by Messrs. Roeding, McHutchison, Thomas B. and Albert F. Meehan.

The route lay from the Multnomah Hotel throughout the business and residential district to the Forestry Building where a stop was made to enable the visitors to inspect the immense specimens of timber and other woods contained in the building.

From there they were taken to City Park, along the new Boulevard, and the new suburban district known as the Ladd addition, thence to Peninsular Park and back to the hotel. The trip consuming the entire afternoon.

The great rose garden at Peninsular Park was unquestionably the greatest attraction. The garden is a sunken one, with broad steps leading to it, and mosaic brick walks. The terrace in the sides of the garden being smothered in masses of hybrid Wichuraiana Roses.

Usually in planting these large rose gardens the idea is to use as many varieties as possible, but this idea has not been carried out here, but instead large masses of one variety have been used for the purpose of elaborating the effect of each particular color.

The varieties used are mainly, Caroline Testout, Frau Karl Druski, Gruss an Teplitz and J. B. Clark, and when it is borne in mind that the rose garden covers four acres and that there are fourteen thousand roses in the garden, more than half of which consist of the five named varieties, and all of them in full bloom, the grand effect may be imagined.

Adjoining the rose garden are extensive play grounds, swings, tennis courts and fully equipped bath houses and gymnasium.

The new secret order of "Yellow Dogs" was a yelping success. Chief Yellow Dog Henry B. Chase was kept busy initiating new members. Over thirty "pups" were entered in the kennels of the order. Among the first candidates were President Meehan and President-elect Pilkington. Others were D. S. Lake, Wallace, Roeding, M. McDonald, Youngers, and others prominent in the nurserymen's association. It is expected that their number will be greatly augmented at the Cleveland meeting.

### REPORT OF THE BUSINESS MEETING OF THE PACIFIC COAST NURSERYMEN'S ASSOCIATION

The Pacific Coast Nurserymen's Association convened at the Hotel Multnomah, Portland, Oregon on the morning of June 17th.

President Albert Brownell read his annual message.

The reports of the Vice-Presidents were read and freely discussed and proved of great interest, as were also the reports of the chairman of the various committees.

Richard Layritz, Victoria, B. C., was elected president of the Pacific coast association and Vancouver was chosen as the meeting place for the next convention. Vancouver and Victoria were both in line for the convention, so the honors were divided between the two.

Other officers elected were as follows, each vice-president representing one of the states included in the association: John Vallance, Oakland, Cal.; C. F. Lansing, Salem, Ore.; D. J. Tighe, Billings, Mont.; F. A. Wiggin, Toppenish, Wash.; Charles L. Trotter, Vancouver, B. C.; Byron Smith, Safford, Ariz.; Carl E. Wright, Kimberly, Idaho. C. A. Tonneson of Tacoma was re-elected secretary-treasurer.

British Columbia men were elected on the executive committee so that they might co-operate in arranging for the convention next year. The new members are Charles L. Trotter, Vancouver; A. R. McDougall, New Westminster; F. R. E. DeHart, Kelowna.

At the close of the session, the visitors were taken to Council Crest for an outing.

One of the Pacific Coast delegates was overheard to remark that he refused an offer for thirty thousand apple trees last spring at twenty five dollars per thousand saying that he preferred to burn them as his responsibility ceased when the trees were on the brush pile.

The thanks of all the delegates was given to J. B. Pilkington for his indefatigable efforts in looking to the comfort and entertainment of the visitors to Portland. In this he was greatly assisted by Mrs. Pilkington who took particular care to see that the ladies were well provided for.

The "Songsters" which were so much in evidence at the St. Louis and Boston Conventions were conspicuous by their absence at the Portland meeting. Let us hope they will reappear at Cleveland.

The Committee appointed on Uniform Inspection Laws and to secure subscriptions to carry out the work, received pledges amounting to upwards of \$1200 by the time the Convention adjourned. The limit from any one subscriber was set at \$25. The subscriptions ranging from \$5 upward. Any nurseryman who has not yet subscribed to this worthy object should communicate with Wm. Pitkin, Rochester, N. Y. Peter Youngers, Geneva, Neb., or M. McDonald, Orenco, Oregon.

Two eastern nurserymen who were so taken with the possibilities and opportunities of the northwest, bought land with the object of settling there.

# SYNOPSIS OF THE JOINT CONVENTION OF THE AMERICAN AND THE PACIFIC COAST NURSERYMEN'S ASSOCIATIONS

**Portland, Oregon, June 18, 19 and 20, 1913**

Promptly at 9:30 on Wednesday morning, June 18th, 1913, President Thomas B. Meehan declared the Thirty-Eighth Annual Convention of the American Association of Nurserymen open and ready for business. Albert Brownell, President of the Pacific Coast Nurserymen's Association, occupied the platform with Mr. Meehan.

Previous to that time the delegates had been gathering at the Hotel Multnomah in large numbers, coming from the east, the middle west and particularly strong from the Pacific Coast. Previous to the opening of each session selections were rendered by the Portland Ad. Club Male Quartette.

Hon. Jos. M. Teal, representing Gov. West and Tom Richardson, representing Mayor Rushlight extended a hearty welcome to the delegates to the state and city. P. A. Dix, Roy, Utah, acknowledged the compliment for the Pacific Coast Association and John B. Morey, Dansville, N. Y. for the American Association.

President Meehan read his address which was followed by one from President Brownell for the Coast Association. These formalities over, the regular order of business was taken up.

Papers were read by E. W. Kirkpatrick, Kinney, Texas, on "What Shall the Future of Horticulture be?" and this was discussed by Geo. C. Roeding, Fresno, Cal. and H. W. Kruckeberg, Los Angeles, Cal. W. H. Stark, Neosha, Mo., read a paper written by his father, Wm. P. Stark, on "Standardization of Nursery Inspection." James McHutchison, New York, made his report as chairman of the Membership Committee, showing the acquisition of over 100 new members and more coming. A paper was also read by L. P. Stark of the Stark Nursery and Orchards Company, Louisiana, Mo. on "Closer Co-operation between Nurserymen and Orchardists." "Park Making on the Pacific Coast," by Emil F. Mische, superintendent of Parks, Portland, Oregon, was a most interesting one, particularly as later in the day the delegates were to have the opportunity of viewing for themselves the extensive park system of Portland, so ably constructed by Mr. Mische.

L. J. Farmer, Pulaski, New York, gave a most interesting talk on "Care of Small Fruit Plants. Duty of Nurseryman and Planter." Mr. Farmer is a "small fruit" specialist and was able to give many useful hints on the planting and care of them.

"Working and Results of the New Federal Horticultural Law," by James McHutchison; "Horticultural Laws," by Geo. C. Roeding; "Oregon's New Quarantine Law," by W. K. Newell, Gaston, Oregon; "Nurserymen's Problems in Fungus and Bacterial Diseases," by Prof. H. S. Jackson

of the Oregon Agricultural College; "Uniform Horticultural Laws, Their Enforcement and Benefits," by A. J. Cooke, Sacramento, Cal. and D. J. Tighe, Billings, Montana, all of the above being thoroughly discussed by Peter Youngers, Geneva, Neb.; Prof. M. L. Dean, State Horticulturist, Missoula, Mont.; F. W. Wiggins, Toppenish, Wash.; A. W. Morrell, State Entomologist, Phoenix, Arizona; F. H. Wilson, Fresno, Cal., and others. The above comprised the subjects taken up at this convention on "bugology." "Some Problems of Interest to the Nurserymen, Fruit Grower, and Experiment Station," a very complete paper by Prof. C. I. Lewis, of the Oregon Agricultural College, proved exceedingly interesting, as was also one "Between the Nurseryman and Fruit Grower," by Prof. O. M. Morris, Pullman, Wash., and which were discussed by N. D. Needham, Des Moines, Iowa, and E. A. Bennett, Salem, Oregon.

The paper on Horticultural Laws, by Mr. Roeding struck the key note to the harm being done to the nursery and fruit industry of the country due to the diversity and conflicting laws in the various states and the necessity of a uniform law which while protecting the fruit grower should also avoid ruination to the nurseryman.

It was this paper by Mr. Roeding which lead to the introduction of a resolution for the appointment of a committee of five members from the American Association of Nurserymen to confer with a similar committee from the Pacific Coast Association to consider this whole subject and report at this meeting. The joint committee were:

From American Association of Nurserymen: Peter Youngers, Geneva, Neb.; Henry B. Chase, Huntsville, Ala.; J. B. Morey, Dansville, N. Y.; A. H. Kirkpatrick, Kinney, Texas; C. M. Peters, Salisbury, Ind.

From Pacific Coast Nurserymen's Association: P. A. Dix, Roy, Utah; M. McDonald, Orenco, Oregon; S. A. Miller, Milton, Oregon; Geo. B. Roeding, Fresno, Cal.; F. A. Wiggins, Toppenish, Wash.

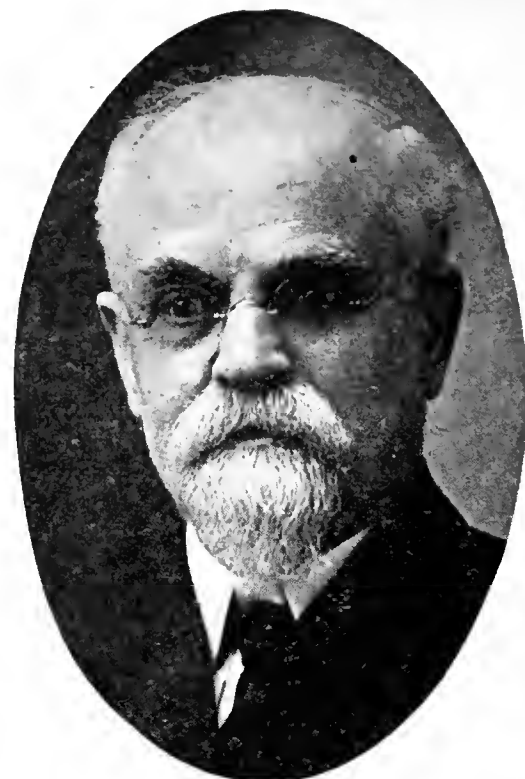
The report of this Committee, which was in the form of a resolution was greeted with great enthusiasm, was unanimously adopted, and the following committee was named to carry out the work as outlined in the resolution, a copy of which will be found on another page: Wm. Pitkin, Rochester, N. Y., chairman; Peter Youngers, Geneva, Nebraska; M. McDonald, Orenco, Oregon.

A gratifying feature of the convention was the presence of Mr. A. Miller and his wife, Milton, Oregon, a pioneer nurseryman of Oregon and the Hon. E. L. Smith, Hood River, Oregon, one of the early fruit growers of the State, both of whom are hale and hearty and who responded to the request of President Meehan to address their co-laborers





THOMAS B. MEEHAN  
Member Executive Committee  
Dresher, Pa.



JOHN HALL  
Secretary  
Rochester, N. Y.



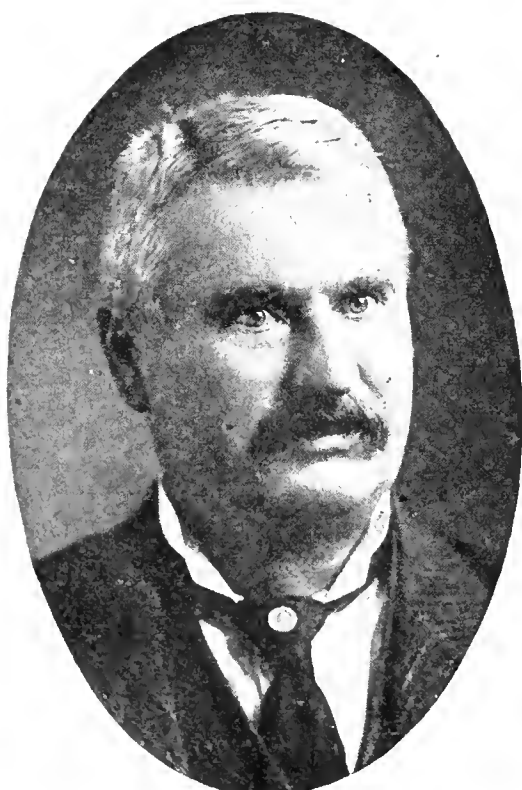
P. A. DIX  
Member Executive Committee  
Roy, Utah



J. B. PILKINGTON  
President  
Portland, Oregon



JOHN H. DAYTON  
Member Executive Committee  
Painesville, Ohio



PETER YOUNGERS  
Treasurer  
Geneva, Nebraska



HENRY B. CHASE  
Vice-President  
Huntsville, Alabama

THE NEWLY ELECTED OFFICERS OF THE AMERICAN ASSOCIATION OF NURSERYMEN

in the field of Horticulture. At the conclusion of their remarks the delegates arose as a token of their respect to these veteran horticulturists.

Prof. J. O. Neff, representing the University of California, in Southern California horticulture, and who attended the convention, was called upon, and in his remarks, suggested that more care be exercised by nurserymen in growing good stock, and to educate the farmer and fruit grower in the production of all good fruit.

Mr. N. Levavasseur and wife from Ussy, France, who made the trip for the purpose of attending the convention, and to visit the Pacific Coast, was also called upon to address the convention. He complimented the nurserymen of the United States and dwelt at length upon the horticultural advancement of this country and urged closer alliance with foreign countries in this respect. He spoke of the good work being done by the International Society of Horticulturists in Europe and urged the American Association of Nurserymen to affect an alliance with them which he assured would be of mutual and lasting benefit.

Friday, the 20th, was occupied by the American Association of Nurserymen in the transaction of business pertaining to that Association and to the reading of the reports of the various committees of their work during the period since the convention held in Boston last June.

A communication was read from J. Edward Moon, Morrisville, Pa., urging the Association to appoint a committee to confer with a similar committee of the Ornamental Growers Association, for the purpose of formulating some plan for the publishing of a trade directory. This suggestion had already been referred to with address of President Meehan who endorsed the idea.

The committee appointed to consider the recommendation of the President reported favorably on this suggestion and the Chair appointed the following Conference Committee: Wm. Pitkin, Rochester, N. Y.; Wm. Flemmer, Springfield, N. J.; Chas. J. Maloy, Rochester, N. Y.

A paper was presented by W. H. Wyman, North Abington, Mass. on "Government Inspection of Nurseries in the New England States and Legislation Applying to Same," but for lack of time it was not read, but was ordered printed in the annual report.

The Committee on the President's address approved of many of the changes he suggested in the Constitution and By-Laws particularly those giving authority to the President or Vice-President, subject to the approval of a majority of the Executive Committee, to appoint officers to fill vacancies caused by the death of any officer of the Association. They also recommended that the three members of the Executive Committee be elected one for three years, one for two years and one for one year. These suggestions were all adopted by the Association.

The Committee on Resolutions presented the following report:

WHEREAS The American Association of Nurserymen and Pacific Coast Association of Nurserymen meeting in joint convention in Portland, Ore., June 17th to 20th, inclusive, have been recipients of many courtesies and

favours both during the stay in Portland and enroute, and desiring to express our appreciation of the same,

*Therefore be it resolved*, that a vote of thanks of the joint convention be extended to the following:

To the Portland Floral Society for their generous contribution of flowers and lavish floral decorations of hall and exhibit rooms.

To Mr. and Mrs. Dahlman for flowers sent Nurserymen's special car at Missoula.

To the Washington Nursery Co. and the citizens of Toppenish, Zillah, Wapato and N. Yakima for their generous hospitality.

To the Milton Nursery Co. of Milton, E. H. Shepard, H. S. Galligan and F. H. Stanton and the Apple Growers Association of Hood River, to the Kennewick Commercial Club and to S. B. McFarland and H. Tabke of Portland for the luscious fruits and beautiful roses.

To the bunch of native sons of the Golden West hailing from California for the extensive exhibits of fruits and products of their glorious state.

To the Portland ladies for the many courtesies and the reception tendered the visiting nurserymen and their wives.

To Dr. A. J. Cook of California for his instructive address and "Bug" exhibit.

#### RESOLUTIONS

To the Oregon Nursery Company for their invitation to lunch and trip to the nursery at Oreneo.

To John Thompson of the Seattle Parks for his entertaining trip through the parks.

To the trade journals and the Portland press for their generous reports and convention notices.

To the management of the Multnomah Hotel for their liberality and generous hospitality.

And, last but not least to the Committee of Arrangements whose untiring efforts have made this convention one continual round of pleasure.

*Be it further resolved* that these resolutions be spread upon the records of both associations and a copy be furnished the press and trade journals.

AND WHEREAS, Almighty God, in His wisdom, has moved by death, several who have been active in the work of these Associations here assembled, be it,

*Resolved*, that our sympathies be and hereby are extended to the relatives and friends of

George S. Josselyn, Fredonia, N. Y.

Michael H. Golden, Rochester, N. Y.

Prof. John Craig, of Cornell University, at Siasconset, Mass.

Charles L. Yates, Rochester, N. Y.

Benj. Chase, Derry Village, N. H.

George Allen Sweet, Dansville, N. Y.

Charles Dingee, Westchester, Pa.

William D. Ellwanger, Rochester, N. Y.

Martha G. Lear, Westchester, Pa.

T. V. Munson, Denison, Texas,

whose kindly faces and hearty co-operation will be missed from this and future gatherings. And be it

*Resolved*, that these resolutions be spread on the records of Association here assembled.

Respectfully submitted,

L. J. FARMER,  
W. G. CAMPBELL,  
J. M. CHARLTON,  
CARL D. NEEDHAM,  
ALBERT F. MEEHAN,

*Committee of the American Association of Nurserymen.*

H. W. CRUCKENBERG,  
CHAS. H. HAWKES,  
GUY M. PILKINGTON,

*Committee of the Pacific Coast Association of Nurserymen.*

Of course the greatest interest in the reports of committees was that of the Vice-Presidents whose duty it was to submit nominations for officers and the place of next meeting.

These nominations were as follows:

For President: J. B. Pilkington, Portland, Oregon.

For Vice-President: Henry B. Chase, Huntsville, Ala.

For Secretary: John Hall, Rochester, N. Y.

For Treasurer: Peter Youngers, Geneva, Neb.

For Executive Committee: Thomas B. Meehan, Dresher, Pa.; John H. Dayton, Painesville, Ohio; F. A. Dix, Roy, Utah.

Each to serve for three, two and one years respectively, in the order in which they were named.

For meeting 1914 convention: Cleveland, Ohio.

Immediately upon the reading of the report, John B. Morey moved its acceptance, and followed with a motion that the Secretary cast one ballot for the officers and place of meeting named in the report.

The Chair appointed a committee to conduct the newly elected officers to the platform, when they separately pledged themselves to not only continue the great work of the Association but also to do all possible to extend its usefulness.

The business being concluded, the President, after a few remarks thanking the members for their hearty support and co-operation during his administration, announced the closing of the Convention.

#### ADDRESS OF THOMAS MEEHAN, PRESIDENT, JUNE, 1913

This is the 38th annual convention of the American Association of Nurserymen, and for the first time in its history, I think, that we have had the opportunity of holding a joint convention with a local organization, who are striving, as we are, to advance the nursery trade and better its condition. This joint meeting, will, I am sure, be of material benefit to all of us, as the interests of the Pacific Coast Association are so closely allied with those of our own.

Many of us have travelled several thousand miles to be here, and to see with our own eyes the great work which the coast nurserymen have done in the establishment of nurseries, orchards and the beautifying of the home grounds, and I am sure we shall return east feeling amply repaid for the long and tedious journey which we have undertaken and that our visit here will go far towards cementing the pleasant and

cordial relations existing between the east, and the west, the Pacific Coast States.

At the suggestion of the officers of the Pacific Coast Nurserymen's Association and with the approval of the Chairman of our Executive Committee, I agreed that this should be a joint convention of the American Association of Nurserymen and the Pacific Coast Nurserymen's Association and I have the pleasure of sharing my office as president with Mr. Albert Brownell, the president of the Coast Association.

It has been arranged that we shall hold our meetings jointly, with the exception of the session on Friday, on which day our Association will hold a separate meeting, for the purpose of electing officers, place of next meeting and the transaction of such business as may pertain wholly to our Association.

This arrangement I am sure will be wholly satisfactory to the members of our Association.

It has been but a few years since these Coast States were almost wholly dependent upon the country east of the Rockies for their supply of fruit and ornamental stocks, but now this is changed, and we find here great nurseries, which are not only filling all demands for fruit trees and a great deal of the fruit stocks required for home consumption, but are growing them in such vast quantities that they are seeking markets in the middle west and even in the eastern states for an outlet for their products.

With these conditions confronting us, what may we expect in the next ten years?

It has been supposed that the supply of Pear, Plum and Cherry stocks must be produced in France, that climatic conditions precluded the possibility of successfully growing them in the United States, yet for several years past these Pacific Coast States have grown quite large quantities of these stocks for their own consumption, and successfully too, and I venture to predict that at no distant date they will not only grow all the fruit stocks they require for their own use, but will also produce sufficient to supply a large part of the demand in the east and middle west.

And why should this not be so? Hundreds of thousands of dollars are annually sent to France to pay for the millions of fruit stocks which we use, and which we may properly call our "raw material."

We should, by trial and experiment, find in this vast country, certain localities where all the different stock we use can profitably be produced, and when these locations are found we may truly call this a "free country" and at the same time cut ourselves loose from the drastic laws which are continually being enacted, and which tend to hamper our trade relations with foreign countries.

Since our last convention several very important matters have developed. The first was the unexpected passage of the so-called Federal Inspection Bill, which your Legislative Committee so successfully contested for three years. I speak advisedly when I say "so-called" for those who advocated its passage insisted that the quarantine features of the bill were of secondary consideration, yet the Federal Horticultural Board, having in charge the carrying out of the law and providing the Rules and Regulations governing it,



have made the quarantine feature most prominent, and in fact immediately the Bill became a law, placed a quarantine on all Europe, preventing the importation of White, as well as on several other varieties of Pines, and recently extended the list to include all five needled Pines.

Even the father of the bill, Dr. Howard and his Assistant, Mr. Marlatt, had given up all hope of its passage. Dr. Howard having left for Europe and Mr. Marlatt being in San Francisco on the point of leaving the country on an extended trip, when the bill was unexpectedly brought up in Congress, passed and became a law on the 20th of August last.

I mention this as indicating the influences which our Association can exert and successfully control as a body, for the good of the nursery industry as a whole. I feel certain, and in fact have it upon good authority from friends of the bill in Washington, that had there not been a division in the ranks of the nurserymen, that this bill could not have been passed until certain features objectionable to your Legislative Committee had either been modified or entirely eliminated.

The duty of carrying out the provisions of this law is vested in a Horticultural Board which was appointed by the Secretary of Agriculture. The gentlemen comprising this Board have been untiring in their efforts to carry out their rules and regulations to avoid as far as possible any delay or loss on imported stock, but the magnitude of their work, I believe, was greater than was ever contemplated by those who advocated the passage of the bill and on this account, as well as the confusion incident to the first operation of any law, has caused more or less of the misunderstanding or delay which may have occurred in any shipments this year.

With the experience gained through the operation of the law during practically its first year, much of the red tape has recently been eliminated and some of the rules and regulations so modified as to do away with some of the unnecessary work heretofore required.

The sudden and unexpected death of our late treasurer, Charles L. Yates, most forcibly brought to my attention the weakness of our Constitution and By-Laws, inasmuch as they make no provision for the appointment by the President or Executive Committee of any officer to fill a vacancy pending an election at the annual meeting.

The funds of the Association were deposited in the Union Trust Company, Rochester, New York, in the name of the American Association of Nurserymen, Charles L. Yates, Treasurer. As I deemed it necessary to appoint a temporary treasurer, that the accumulating bills might be promptly paid, I appointed Charles J. Maloy, of Rochester, New York to that position, after first receiving the approval of the Executive Committee.

The Union Trust Company, however, refused to transfer the funds of the Association to him, until they were given a certified copy of the minutes of a meeting of the Association, showing the election of Mr. Maloy, as Treasurer, this being their authority to transfer the account to his name.

After explaining the situation and the impossibility of furnishing such authority at that time, they agreed to accept a certified copy of the by-laws, as showing the authority

given to the President or Executive Committee to make such appointment in the event of a vacancy.

An examination of the Constitution and By-Laws, much to my surprise, failed to show any authority for either the President or Executive Committee to make an appointment of any officer, should a vacancy occur before a meeting of the Association.

After a correspondence, lasting nearly six weeks, the Trust Company finally agreed to accept as authority, Section 1,—of the by-laws, which reads "The President shall preside at all meetings of the Society and have a general supervision of its affairs," and Section 5, which says "The Executive Committee shall have general supervision of the affairs of the Society, auditing all bills, contracting for the publication of the Annual Report and carrying out the purpose of the Society."

I am free to admit that to my mind, the authority to appoint a temporary treasurer or any officer, under these two sections is not very definite, and evidently the Trust Company thought so too, for it was some time before they decided to accept them in that light, and then only with the understanding that the appointment should be approved in writing by all the members of the Executive Committee. This was promptly furnished them, and the funds transferred to an account opened in the same Trust Company, under the name of the American Association of Nurserymen, Charles J. Maloy, Treasurer.

I also appointed Secretary Hall and Marsden B. Fox, as a committee to audit the account of the late Treasurer, which they did and reported to me that his books, accounts and vouchers were found to be correct, and that they had given a receipt in full to the executors of Mr. Yates' estate.

The Surety Bond of the late treasurer would have expired on the 31st day of December 1912. I therefore, suggested to Mr. Maloy that he procure from the same company a new bond to cover the period from the first of November 1912 to July 1913. This was likewise accomplished, the Company allowing a credit for the two months which the old bond had still to run until its expiration.

The adjusting of these matters pertaining to the surety, brought to light the fact that the Treasurer of our Association carries at nearly all times a balance of approximately \$5000 but is only under \$2500 bond. While the Association has always been fortunate in selecting for its treasurer, men of unquestioned integrity, it seems to me that the amount of the bond is too small, and that when a new one is made, it should be at least for four if not five thousand dollars.

To properly safeguard the funds of the Association, it would seem to be entirely proper that the Secretary should also be bonded. The Treasurer is the custodian of the funds, yet he only holds such as may be turned over to him by the Secretary, by whose hands all moneys are collected.

It has been suggested to me, during the past year, that the office of the Secretary and Treasurer should be one, and if this idea could be carried out the funds of the Association would be amply protected by one bond of sufficient amount to cover the usual balance in the treasury which is approximately \$5000. This suggestion I urge for your consideration.

In view of the difficulty experienced in securing the transfer of the funds of the late treasurer to the treasurer *pro tem*, I strongly urge the appointment of a committee of three, whose duty it shall be to revise our Constitution and By-Laws and that this committee shall be appointed promptly, with instructions to report to the Association before the close of this Convention, so that should they make any recommendations, they may be promptly acted upon. This committee might also consider and act upon the suggestions with reference to the amount of the treasurer's bond, and the advisability of electing one person to act as both secretary and treasurer.

Last June when expressing my appreciation of the honor you had conferred upon me by electing me as your president, I expressed my surprise that our membership was but about four hundred while the Pacific Coast Nurserymen's Association embraced a membership of upwards of two hundred and fifty, or more than half as many as this, our National organization. I determined that the question of membership was a very important one and should receive attention, and after canvassing the field, I selected Mr. James McHutchison as chairman of a membership committee and clothed him with authority to make an active campaign for new members.

Mr. McHutchison entered upon this work with all the zeal and energy for which he is noted. I do not want to steal his thunder, and will therefore let his report, which he will present at a later session, speak for itself.

The results he has secured from this campaign point to the necessity of a permanent committee on membership with a chairman who will continue the work so successfully started by Mr. McHutchison.

I wish here to express my appreciation and thanks to the chairman of all the committees, who have been indefatigable in their efforts to protect and advance the interests of the nurserymen of this country and to make our association a success. I sometimes feel that the members individually do not sufficiently appreciate how much time these gentlemen are giving and the work they are doing. We are surely fortunate in having among us such public spirited men who are willing to give so much of their valuable time to the Association.

As an illustration of what may be accomplished by united action I refer to the successful ending of the case of E. W. Reed against the State Inspectors of Colorado. The case was financed jointly by the Western Association of Nurserymen and the American Association of Nurserymen, as it was considered a test case, the outcome of which would be of lasting benefit to every member of our Association.

Only recently the inspectors of the State of Massachusetts destroyed an entire shipment of imported Rhododendrons, because they claimed that some of the plants had crown gall. It seems to me that this is another case which should be investigated by our Legislative Committee and if the evidence warrants it, the Association should financially back a case to recover damages.

At a meeting of the Ornamental Growers Association, held in New York City in January last, a suggestion was made that there should be prepared a directory of nursery-

men who were actually engaged in the growing of nursery stock, or if dealers or others should be included in the list, they should be so arranged or classified, that those who consulted the directory should have accurate and up to date information. It was decided that this was a work which could be undertaken only by a Nurserymen's Association, but that it was too great for the Ornamental Growers Association alone. A committee consisting of J. Edward Moon, John H. Dayton and Thomas B. Meehan was appointed to investigate the matter and report at the next meeting, and in the meantime to bring the matter to your attention in the hopes that you would appoint a similar committee to act in conjunction with them, for the purpose of determining the feasibility of such an undertaking. A communication from Mr. Moon, the Chairman of the Ornamental Growers Committee will be read at the proper time, and I trust you will give it your due consideration.

There appears to be a growing tendency by the Forestry Departments of some of our States, to distribute forest trees at what they claim to be the cost of production. We have at last succeeded in getting rid of the free seed distribution incubus of the United States Government, but State Forestry Nurseries seem to be growing rapidly, and are as great or a greater menace to our business and I feel that some action on this question should be taken by our Association.

The State of New York, for instance, is offering White Pine transplants, four years old at \$4.00 per 1000. Two year seedlings at \$1.50 per 1000. White Ash Seedlings at \$3.00 per 1000. Black Locust at \$2.50 per 1000. Carolina Poplar cuttings at \$1.50 per 1000 and other coniferous and deciduous forest trees at similar prices.

There is no doubt that the question of re-forestry is one requiring important consideration, and every reasonable inducement should be offered to land owners to plant trees for forestry purposes, but why should any state government furnish trees at cost any more than that they should supply fruit trees at cost to the orchardist.

There are many large nurseries which are making a specialty of raising trees for forestry planting, and it does not seem right that the National or any State government should step in and compete in this business, with all the odds against the nurserymen, who, perforce, must conduct his business for a profit and not for his health or pleasure alone.

This matter is a serious one, and sooner or later must be met by some action of our Association.

Some years since, at a meeting of our vice-presidents, I suggested that some regular or systematic plan should be adopted for the selection of the place of meeting of our annual convention. Last year we met in Boston, almost an extreme eastern point,—this year we have come to almost an extreme western city in the United States, and next year, under our present method of choosing a meeting place, we are just as likely as not to go to an extreme southern point, all depending upon the eloquence or personal magnetism of those who champion some beautiful or attractive location.

I believe that as this Association is for the good of every nurseryman in this great country, its meetings should be held in various sections, but this should be done in such a manner as to avoid the selection of extreme points in two succeeding years.

To my mind this can only be accomplished by dividing the country into several sections, and the meeting place selected in consecutive order each year, in one of these sections, returning to the first section after a meeting has been held once in each of the sections.

I throw this out merely as a suggestion, believing that if it would be taken under consideration by our Executive Committee, at least some plan could be evolved, which would do away with our present hit or miss system, and would prove of great and lasting benefit to our Association.

It has been suggested at various times, that some one city like Chicago should be selected permanently as our Convention City, but I can see no reason why nurserymen in or near that city should be so favored, leaving those members living at a more or less greater distance to take their time and spend their money to go there year after year. It is the duty of the Association to go to the door of the eastern or western or southern nurserymen at least once in five years.

During the last twelve months, since our convention in Boston, the Silent Reaper, has been active in our midst, and death has taken from us several members, who for many years were active in the work of the Association, and who have done much toward advancing and elevating the nursery interests of this country. Our Boston meeting was scarcely brought to a close when the death occurred of Geo. S. Josselyn, quickly followed by Prof. John Craig, Treasurer Charles L. Yates, Geo. A. Sweet, Wm. Smith, O. P. Nichols, Joshua I. Maxwell, R. W. Reasoner, Chas. Dingee, Wm. R. Smith, T. V. Munson, Benj. Chace, J. W. McNary, S. D. Willard, Miss Martha Lehr of the Morris Nursery Company and J. R. Trumpy, the latter one of the oldest and best known propagators of ornamental nursery stock in the United States and for many years associated with the old firm of Parsons & Co.

The memory of these kind friends and co-laborers should be an inspiration to us to continue the great work these men so successfully carried on. Their kindly faces, congenial dispositions and helping hands will be sadly missed at this and future gatherings of our Association, but how fittingly we can say "The good which men do live after them," for truly the good which these men have done will last even unto many generations.

#### ADDRESS OF ALBERT BROWNELL, PRESIDENT PACIFIC COAST NURSERYMEN'S ASSOCIATION

Fellow Members of the American and Pacific Coast Association of Nurserymen in joint convention assembled, it is with great pleasure we greet you and assure you of a most hearty welcome.

Many of you have traveled a long distance to be with us today; we appreciate this, and trust you may be amply repaid for your trouble.

To the Members of the Pacific Coast Association, and especially you of Portland and the Willamette Valley, please

consider yourselves all a committee to see that our Eastern Friends do not have a dull moment while with us.

Ten years ago this month the Pacific Coast Association of Nurserymen held their First Annual Convention in this city, with only a score of members in attendance. This year our Badge Book shows a membership of between three and four hundred, which no doubt will be considerably increased before the close of this meeting.

At that time we were all just beginning to recover from a long season of depression, which had put many nurserymen entirely out of business and severely tried the resources of all. Many of our friends when approached in regard to forming an organization for the betterment of nursery interests were doubtful and suspicious, did not care to give information for the general good, or felt they could not afford the expense and time to attend a convention.

It has been a great pleasure to me to attend every meeting of our organization with one exception during the ten years of its life, to watch its growth from year to year, the changed attitude of its members towards each other, and am firmly convinced that while many problems of the nurserymen have at least been greatly lessened by the action of our Association, directly, or through the work of its committees, that the greatest good so far accomplished is the elimination of the old feeling of distrust and suspicion of each other on account of their being competitors, and the substitution in its place of personal friendship; a willingness to help a brother nurseryman in trouble, and a general desire to work together harmoniously to solve our common problems and to place the nursery business on a higher plane.

This I say is the greatest accomplishment of the ten years, for it insures our taking up and working out together the questions still confronting us—many of which we would be unable to solve singly.

#### INSPECTION

It has been the policy of this Association to work with the orchardist for the passage of Inspection Laws that would be fair and just, and at the same time be a protection to both the nurseryman and the fruitgrower, and we are pleased to say that the inspection authorities are recognizing this fact and are willing and anxious to meet us in an effort to overcome friction and injustice wherever it may appear. We wish to commend this policy as one well worthy of continuance.

#### COMMITTEE OF PRESIDENTS

Our last Convention provided for a new standing committee to be made up of the Past President, the Acting President and the President Elect, who shall have charge of Legislative, Inspection, Legal and Experimental work attempted by the Association, and also to raise funds for the committees use. This action was taken after a thorough discussion at the last two meetings, and is extremely important.

This Committee should have the hearty co-operation of every member, and given all necessary financial support.

[Continued on Page 276]



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The only trade journal issued for Growers and Dealers in Nursery Stocks of all kinds. It circulates throughout the United States, Canada and Europe.

Official Journal of American Association of Nurserymen

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

## SUBSCRIPTION RATES

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Six months .....	1.00

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Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Rochester N. Y.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Address, Editor, Flourtown, Pa.

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ROCHESTER, N. Y., JULY, 1913.

## AMERICAN ASSOCIATION OF NURSERYMEN

PRESIDENT—J. B. Pilkington, Portland, Ore.; Vice-President, Henry B. Chase, Huntsville, Ala.; Secretary, John Hall, Rochester, N. Y.; Treasurer, Peter Youngers, Geneva, Neb.  
EXECUTIVE COMMITTEE—Thomas B. Meehan, Dresher, Pa.; John H. Dayton, Painesville, Ohio; P. A. Dix, Roy, Utah; J. B. Pilkington, Portland, Ore., Ex-officio; John Hall, Rochester, N. Y., Ex-officio.

### CHAIRMEN OF COMMITTEES

TRANSPORTATION—Chas. M. Sizemore, Louisiana, Mo.  
TARIFF—Irving Rouse, Rochester, N. Y.  
LEGISLATION EAST OF MISSISSIPPI RIVER—Wm. Pitkin, Rochester, N. Y.  
LEGISLATION WEST OF MISSISSIPPI RIVER—Peter Youngers, Geneva, Nebr.  
CO-OPERATION WITH ENTOMOLOGISTS—L. A. Berckmans, Augusta, Ga.  
PROGRAM—Samuel Miller, Milton, Oregon.  
EXHIBITS—F. W. Power, Orenco, Oregon.  
ARRANGEMENTS—John Hall, Rochester, N. Y.; J. B. Pilkington, Portland, Ore.  
PUBLICITY AND TRADE OPPORTUNITIES—W. P. Stark, Louisiana, Mo.; Jefferson Thomas, Harrisburg, Pa.; Orlando Harrison, Berlin, Md.; C. M. Griffing, Jacksonville, Fla.; G. C. Roeding, Fresno, Cal.; H. D. Simpson, Vincennes, Ind.; James M. Irvine, St. Joseph, Mo.  
MEMBERSHIP—James McHutchison, New York City.

## STATE AND DISTRICT ASSOCIATIONS.

American Nurserymen's Protective Association—President, J. W. Hill, Des Moines, Ia.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.  
American Retail Nurserymen's Protective Association—President, Charles J. Brown, Rochester, N. Y.; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.  
Association of Oklahoma Nurserymen—President, J. A. Lopeman, Enid, Oklahoma; secretary, C. E. Garee, Noble, Oklahoma.  
California Association of Nurserymen—President, Frank H. Wilson, Fresno, Cal. Secretary, H. W. Kruckeberg, Los Angeles, Cal.  
Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.  
Connecticut Nurserymen's Association—President T. E. Burroughs, Deep River, Conn.; secretary, F. L. Thomas, Manchester, Conn.  
Eastern Association of Nurserymen—President, Wm. C. Barry, Rochester, N. Y.; secretary-treasurer, William Pitkin, Rochester, N. Y. Meets annually in January.  
Idaho Nurserymen's Association—President, W. S. Hawkes; secretary, J. F. Litooy, Boise, Idaho.  
Mississippi Nurserymen's Association—President, J. R. Woodham, Newton; Vice-President, W. A. Woods, Tomnolen; Sec'y-Treas., R. W. Harned, Agr. College.  
National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.  
National Nurserymen's Association of Ohio—President, W. N. Scarff, New Carlisle, O.; secretary, W. B. Cole, Painesville, O.  
Oregon—Washington Association of Nurserymen—President, C. F. Breilhaup, Richland, Wash.; secretary, C. A. Tonneson, Tacoma, Wash.  
Pacific Coast Association of Nurserymen—President, Albert Brownell, Portland, Oregon; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Meets annually in June.  
Pennsylvania Nurserymen's Association—President, Abner Hoopes, West Chester, Pa. secretary, Henry T. Moon, Morrisville, Pa.  
Southern Nurserymen's Association—President, W. A. Easterly, Cleveland, Tenn.; secretary-treasurer, A. I. Smith, Knoxville, Tenn.  
Tennessee Nurserymen's Association—President, E. W. Chattin, Winchester, Tenn.; secretary, G. M. Bentley, Knoxville, Tenn.  
Texas Nurserymen's Association—President, J. R. Mayhew, Waxahachie, Texas; secretary-treasurer, John S. Kerr, Sherman, Texas.  
Western Association of Nurserymen—President, Frank A. Weber, Nursery, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

## TRUTH AND PRINCIPLE

There is no such thing in this life as perfection, yet it is the only thing really worth striving for. Although the goal may never be reached to fight and strive for it is what accomplishes things worth while. It has produced those splendid products of the orchard, field and garden which are so far removed from their ancestors that it is hard to credit their origin. Yet with all the improvement, better will yet come, if perfection be the aim of life.

It has been said, that no man can build truly unless his morals are sound, whether it be growing a tree, painting a picture, building a house, or a business.

Truth is eternal and just to the extent that it permeates the nursery business, so will that business be truly successful. The plowman who cuts and covers; the planter too lazy to care for stock while out of the ground; the salesman who misrepresents, and the employer whose business principles are not honest in the full meaning of the word, are not true workmen.

The business whose only object is to make money, with no ethics, no ideals, working only under legal requirements, can never be a complete success. It neither builds character in its workmen nor gives happiness to its owner. What is true of the individual is true of the profession at large. As is often said regarding the government of the country "The stream cannot rise higher than its source," neither can the nursery business fulfill its possibilities in developing the country, refining its people, or developing their character unless the individual nurseryman is only satisfied with the best.

The nearest to perfection, in quality of stock, honest grade, absolute probity in nomenclature, truest salesmanship and prices that will permit him to grow products worthy of his calling, he can get, the greater will be the measure of real success.

There is no branch of the nursery business less understood than the pruning of evergreens. Even among the growers the ignorance of correct pruning evident in the nursery blocks is appalling. Too often the only pruning the evergreens get is to turn a man loose among them with a pair of shears. This is entirely wrong and shows the grower is not a master of his business.

Evergreens as a rule do not need much pruning, but what little they do need is very essential. A deciduous tree neglected when young can often be brought into shape by pruning, even though it be of good size. Not so with the Evergreens. Neglect them when they are young and they are hopeless so far as making good specimens is concerned, but give them the necessary pruning and training while they are young, nature will take care of them when they get older and no further pruning will be necessary after they have once been started right.

Retinisporas, Thujas and Junipers should be taken in hand when they are very young. Do not allow them to have more than one leader and do not allow the leader to get too far ahead of the proper development of the plant. These remarks of course do not apply to the globe shaped

and dwarf varieties. The side branches will not require much pruning, merely knifing in those that have a tendency to make the plant unshapely.

Pines, Spruces and Firs, if properly grown, require little if any pruning except to correct a fault such as a lost leader then it is necessary to shorten in the top tier of branches to force out another one.

In the case of the Firs a new leader may be made by tying up one of the side branches but not so with the Spruces or Firs.



## Obituary.

### MISS MARTHA G. LEAR

The Morris Nursery Company, of West Chester, Chester County, Pa., lost a valued and much esteemed official in the death of Miss Martha G. Lear, Secretary of the Company. Miss Lear died on May 29th. She was well-known to many nurserymen, who will hear of her death with deep regret.

Miss Lear was a daughter of the late Charles B. and Margaret Palmer Lear, and had spent her entire life on East Chestnut Street, West Chester.

After finishing at High Street Friends' School she entered the employ of the Morris Nursery Company, where by strenuous application she became familiar with the details of the work and made herself invaluable to the firm. At the time of her death she was Secretary of the Company, and in charge of the office on Maple Avenue.

### THOS. J. O'HARA

Thomas J. O'Hara, general manager of the Huntsville Wholesale Nurseries, at Huntsville, Ala., died May 22 at his home. Death came as a result of Bright's disease. He was 42 years old, and had been connected with the same firm for a number of years. He was a native of New York state. He is survived by a widow and two daughters.

### THOMAS WILDE

Thomas Wilde, one of the pioneers of western Michigan, died at the home of a daughter in Ottawa county, May 17, aged 79 years. Mr. Wilde was known as the originator of the flush strawberry and was one of the first to practice cross fertilization of plants in this country. He was also known as a raiser of fine apples. He was born in England and came to America when 14. Mr. Wilde was a life member of the Michigan state Horticultural Society and a charter member of the Grand River Valley Horticultural Society. He is survived by seven children.

### SAMUEL D. WILLARD

The death of this well-known nurseryman and fruit grower occurred on May 23, at his home at Geneva, N. Y., after a few days' illness, in the 78th year of his age. Mr. Willard was born in 1835, of New England parentage, and

spent his early life upon a farm on the east shore of Cayuga Lake, N. Y. He early became interested in agriculture and horticulture, and a careful study of these lines over a large area of the United States and Canada gave him an acquaintance with its technique and an education possessed by few other living men in like pursuits.

Years ago, when it became apparent that Geneva was destined to become a great center of horticultural enterprise, Mr. Willard was induced to locate there and made that city his residence until the time of his death. Mr. Willard believed that a nurseryman should also be a fruit grower, and that the commercial orchardist should not pin his faith too strongly upon the production of any one of the many fruits that can be grown so successfully in western New York. Hence, he grew more or less of cherries, quinces, peaches and pears, as well as many of the smaller fruits. He was the first to plant the Kieffer pear as an orchard tree in New York State and had ever been a strong advocate of this variety as a profitable orchard fruit.

Mr. Willard took a prominent part in forming the New York State Fruit Growers' Association in 1901. He was a State Fair commissioner from 1890 until 1908, having charge of the fruit, flower and vegetable departments. He served several terms as a vice-president of the Western New York Horticultural Society and was one of its oldest members, remembering well when, at the opening sessions of its earlier meetings, President Barry would call the house to order with 20 to 25 members present, and the first business on the program would be to put through an assessment to cover the deficit sure to appear in the treasurer's annual report.



## Business Movements.

The F. W. Brow Nursery Company of Rose Hill was incorporated recently with \$25,000 capital, practically all of which is subscribed. It will operate one of the largest nurseries in Central New York.

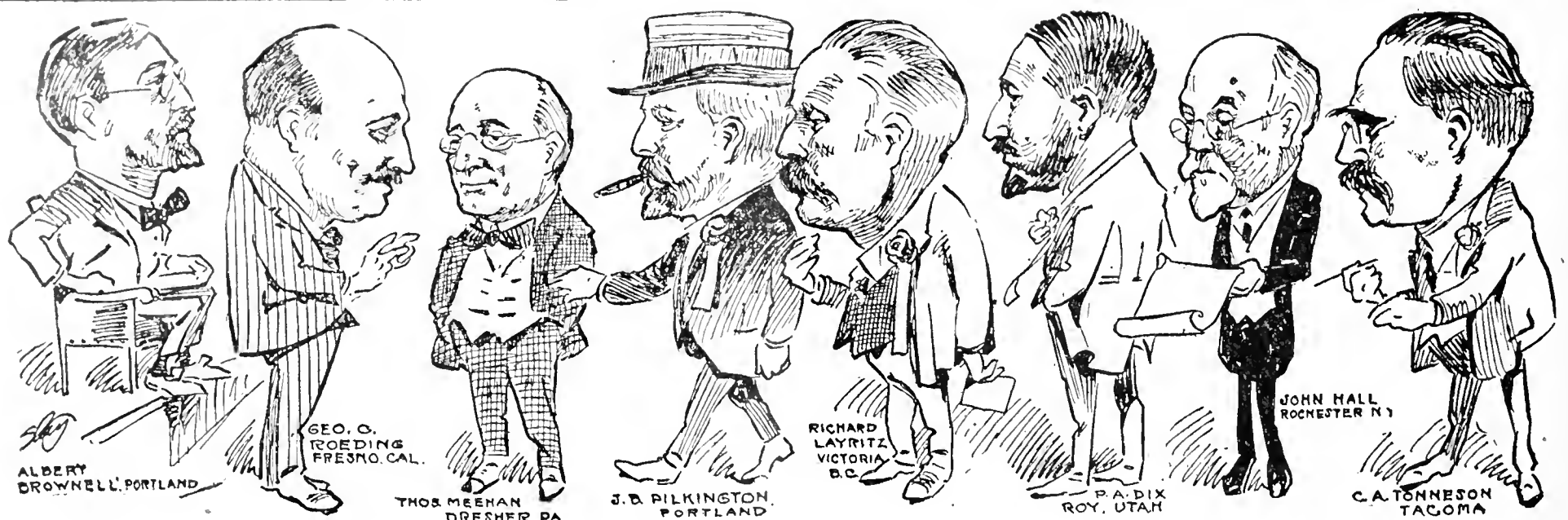
The company, which has been in process of organization for several months, has 140 acres of excellent land at Rose Hill which has been planted and it is expected that the acreage will be greatly increased next year.

The company will do a general nursery business, specializing, however, in fancy fruit trees. Mr. Brow is a practical nurseryman and has had charge of W. & T. Smith Company nurseries in Geneva for nearly 6 years.

The directors of the company are Mr. Brow, Frank B. Mills of the Mills Seed Company and C. Albert Weeks of Skaneateles.

The Convention Hall at the Hotel Multnomah was beautifully decorated with palms and vases of flowers by the Portland Floral Society. The delegates were abundantly supplied with all the loose flowers they could carry with them.

## PEN PICTURES OF LEADING NURSERYMEN DELEGATES AT PORTLAND CONVENTION AS DRAWN BY JOURNAL ARTIST



Oregon Daily Journal.

## PRESIDENT BROWNELL'S ADDRESS

[CONTINUED]

At a number of our Conventions there have been some very creditable individual exhibits made. Believing that the time had arrived when their scope should be extended and recognized and cared for by the Association, we took the liberty to appoint a committee on Exhibits to act in conjunction with the Committee of the American Association—the result you are invited to inspect in the adjoining rooms. The time of our meeting makes it difficult to make an extended display, but we should like to see the plan followed at our future meetings, and we recommend that a standing Exhibits Committee be authorized.

To the Florists of Portland is due our hearty thanks for the material aid contributed, the beautiful decorations, and floral exhibit furnished by them.

We trust that our Reception Committee will be alert at all times to see all welcomed, introduced, made to feel at home and furnished with any desired information.

This Committee has been supplemented by the appointment of an Auxiliary Committee of ladies to care for the ladies in attendance. Please make yourself known to them and they will gladly take care of you.

Finally we hope this joint convention will prove to be not only highly profitable, but enjoyable as well, and that we may all go home feeling that it has been good to be here.

## REPORT OF THE SECRETARY OF AMERICAN ASSOCIATION OF NURSEYRMEN

We have approached this convention with considerable anxiety from the fact that a peculiar combination of circumstances has prevented very many of our members from attending this anniversary. One of the main explanations for this condition is that the meetings of the Association, it is claimed, are held at an inopportune time. The Spring packing season has barely closed by the time for which this annual gathering is scheduled and the work which follows the packing season demands such close attention that members cannot leave home without incurring loss; besides, they have no intelligent idea at that early date of what stock they have on hand and what their future wants will be.

Quite a number of members have expressed themselves as favoring a later date, suggestions varying from two weeks to two months later than the constitutional date.

Then, too, the Panama-Pacific International Exposition of 1915 in San Francisco is claiming the attention of many members to the extent of their letting this convention pass. There are still others who have planned to be present who are prevented from doing so by sickness, either of themselves or members of their families. There is also a strong feeling that the annual convention should be held at some more central point which will be reasonably easy of access to members from all directions.

Never, in the history of the Association, have the receipts of the Secretary been so large as this year. We report a total income of over \$3,300, and we hope to receive at this convention a number of new members.

Another feature which gives us pleasure to mention is the large addition which has been made to the membership through the earnest efforts of Mr. James McHutchison, who was appointed a committee for this purpose by President Meehan.

The Grim Reaper has again been busy among us and in the latter half of the year 1912 the losses sustained were very severe.

June 17th—George S. Josselyn, died at his home in Fredonia, N. Y., age 70 years. "Papa Josselyn" will live in the memory of members not alone as an enterprising nurseryman, but also for his excellent personal qualities.

July 26th—Michael H. Golden, president of the Genesee Valley Nurseries, died in Rochester, N. Y.

August 10th—Prof. John Craig, who was at the head of the Department of Horticulture in Cornell University, died at Siasconset, Mass., in his forty-eighth year. We were able to make record of this effort in the 1912 annual report.

September 14th—Charles L. Yates, died somewhat suddenly at his home in Rochester, age 65 years. Mr. Yates was for many years the treasurer of this Association. He was also business manager of the NATIONAL NURSERYMAN, the official organ of this Association and Prof. Craig as editor of the same publication. It was a singular coinci-



dence that the death of these two men should have come so near together.

September 27th—Benj. Chase, Derry Village, New Hampshire, died, age 80 years. He first became a member of this Association in 1895.

November 13—George Allen Sweet, Dansville, N. Y., was called home at the age of 68.

November 29—Charles Dingee, Westchester, Pa., passed away in his 88th year.

February 16, 1913—William D. Ellwanger, son of the late George Ellwanger, and president of the Ellwanger & Barry nurseries, passed away at the age of 59 at his home in Rochester, N. Y.

May 29th, 1913—Martha G. Lear, secretary of the Morris Nursery Co., West Chester, Pa. This lady has usually been present in our annual gatherings and with your Secretary and Prof. Craig occupied the same automobile in our visit to the Sargent Arboretum at Boston, Mass. last year.

T. V. Munson, Denison, Texas, was also numbered among the deceased during the year.

#### FINANCIAL REPORT

1912

Dec. 5, Bal. for Memberships, etc . . . . \$ 288.75

1913

June 6, Memberships, advts., etc. . . . . 3,025.40      3,314.15  
\$3,314.15

#### DISBURSEMENTS

1912

Dec. 5, C. J. Maloy, treasurer . . . . . \$ 288.75

1913

May 1, C. J. Maloy, treasurer . . . . . 1,900.00

June 6, C. J. Maloy, treasurer . . . . . 1,000.00

Balance in bank on hand . . . . . 125.40

\$3,314.15

C. J. Maloy, treasurer, also reports,

Receipts, \$9,520.66; balance, \$6,316.79.

#### REPORT OF THE COMMITTEE ON LEGISLATION EAST OF THE MISSISSIPPI RIVER

As Chairman of the Committee on Legislation East of the Mississippi River, I beg to submit the following report:

##### FEDERAL LEGISLATION

Much of the work of this Committee during the past five years has been the consideration of the proposed legislation affecting the importation of foreign nursery stock and the quarantine of domestic stock, and at the St. Louis Convention of 1911 and the Boston Convention of 1912, full reports were made covering the situation existing at the time. The report made at the Boston Convention concluded by saying that the bill then under consideration, introduced May 3d, 1912, No. 24119, was not likely to be acted on during the then present session of Congress, and your Committee suggested "that it should be instructed as to the views and wishes of the Association, and authorized to continue to carefully watch the progress of the present bill, and to safe-

guard as far as possible the interests of the members of this Association." Much to the surprise of everybody, including your Committee and the officials of the Department of Agriculture, the bill passed Congress in August, 1912, substantially as shown by Bill No. 24119.

The next work of your Committee was an effort to get the "Rules and Regulations" of the Department as authorized by the law in such working shape as would be practical and least burdensome to the trade. In September, 1912, your Committee had a conference in Washington with several of the members of the Horticultural Board, and succeeded in materially modifying the requirements suggested by the Board. We found the members of the Board anxious to so arrange the regulations as to make them as little burdensome as possible, consistent with the proper protection of the public, and the rules as adopted and promulgated have been in effect during the past shipping season, with some slight modifications from time to time as necessities arose, and have worked with fair smoothness, considering that they were new and, to a certain extent, of an experimental nature.

During the month of May, your Committee received from Mr. Marlatt, Chairman of the Federal Horticultural Board, a draft of proposed "New Rules and Regulations." These were carefully considered by your Committee, and some changes and modifications suggested, and the "New Rules and Regulations" have been printed and issued by the Department as Circular No. 44, dated May 26th, 1913, and can be secured by any nurseryman by application to the Federal Horticultural Board at Washington, D. C.

The new rules are, in general, better and easier than those in effect last winter. One important change is a provision for a blanket permit covering all of the importations which you may propose to make from any one foreign concern. It will not be necessary to include in your application a statement of the quantities or items to be imported, except as to Pines, and you will receive a general permit covering your transactions with the foreign exporter during the season, but when the goods arrive, whether in one or more lots, you will be required to send a statement to the Federal Horticultural Board, giving in detail the items received, which would practically be a copy of your consular invoice; the same notice to be sent to the state inspector who will have charge of the inspection at destination.

The changes in the new rules are generally in the line of removal of unnecessary restrictions, and in that respect are an improvement on the previous rules. There are still some provisions in the rules which seem to your Committee to be unnecessary, and which add to our burdens and the burdens of the Federal Horticultural Board, without increasing the efficiency of the regulations, and your Committee has suggested to Chairman Marlatt a further conference during the summer, for the purpose of considering such points; therefore, your new Legislative Committee should be instructed as to your views and wishes, and, if you think it wise, should be given instructions to continue such conferences with the Federal Horticultural Board as it may deem advisable.

In conclusion, your Committee wishes to correct an erroneous impression evidently in the minds of some of the members of this Association. It has seemed to be the

impression that this law under discussion provides for the federal inspection of foreign nursery stock. There is no provision in the law for the federal inspection of foreign nursery stock. The law provides that foreign nursery stock must be inspected in the country where it is grown before it can be imported, but that is the only requirement for inspection. The laws of various states require state inspection, and the federal law obliges you to send a notice of the arrival of foreign stock to the state inspector, but it does not and cannot oblige the state inspector to inspect your stock, so that as far as inspection is concerned this law has not changed the previous existing conditions except that it will probably make more effective the inspection in foreign countries. So far as inspection on this side is concerned, you will still depend on state laws, as heretofore.

It has been stated to your Committee by some members that this law is a good thing because it provided for federal inspection. That impression is entirely erroneous. The substance of the law is that it places authority in the hands of the Federal Horticultural Board, at their option, to declare a quarantine against any and all foreign nursery stock and prevent its introduction into the United States; and further, the law gives the Federal Horticultural Board power to quarantine any nursery or nursery section in the United States and prohibit shipments of nursery stock out of that nursery or section during the continuance of the quarantine.

Those are the main and important provisions of the law, and the provisions which some day may make trouble. It is, of course, hoped that the law will be administered wisely and with good judgment. If it is, perhaps no serious difficulties will result, but the law lodges in the hands of the Federal Horticultural Board the power to absolutely control the importation of nursery stock from foreign countries, and to absolutely prevent you from shipping out your goods at any time when in the judgment of the Board it may seem proper to do so. The other provisions of the law, for applications and permits, are matters of detail. The substance of the law is quarantine—foreign and domestic. In the opinion of your Committee, the enactment of this law is not a subject of congratulation by the nurseryman, but rather one that should be viewed with regret and with the fear that some day it may be so administered as to cause us serious trouble and loss.

Your Committee feels that the present Board of Horticulture has treated us fairly and reasonably, and expects that this condition will continue. They have listened to our arguments and suggestions courteously, and have given us every opportunity to present our views, and the thanks of this Association are due that body. It is to be hoped that future Boards and future officials will follow on the same wise lines, and that we shall have no serious difficulties, but the risk is and will be ever present.

#### STATE LEGISLATION

##### *State of New York*

During the session of the Legislature last winter, a bill was introduced which would have been very burdensome to the nursery interests. After considerable work, the bill was amended, or rather re-written, and most of the objectionable

provisions eliminated. It failed of passage, however, but is likely to reappear next winter, and as it still contains provisions requiring registration and licensing of outside nurserymen doing business in New York State, it is of interest to the Association generally, and your new Committee on Legislation should be instructed to keep careful watch of this matter and secure such modifications as will remove any and all unnecessary burdens. The bill also contained some provisions affecting only New York State nurserymen, which should not be allowed to pass.

##### *State of New Jersey*

Last winter some of our members received a notice from the New Jersey Inspection Department to the effect that we must furnish that Department a list of the customers in New Jersey to whom shipments were made, and accompany such list with a detailed statement of the quantities and kinds of stock shipped to such customers. Your Committee had considerable correspondence on the subject, endeavoring to point out the difficulties and large amount of labor necessary to send lists of retail orders handed through delivery agents, and finally the New Jersey authorities withdrew the ruling and said that the rule need apply only to large shipments made direct to the purchasers, which, of course, was a comparatively easy matter to handle.

##### *State of Illinois*

Last fall some of our members received a notice from the inspection authorities of Illinois, to the effect that we must attach a copy of inspection certificates to each package or bundle contained in a box, as well as attaching copy of the certificate to the outside of the box; this to apply to retail deliveries handled through agents or deliverymen, so that each customer in the delivery would be sure to receive an inspection certificate. On examination of the Illinois law, your Committee was unable to find any provision in the law authorizing such an order, and so stated to the state inspector, who referred the matter to his Attorney General, and the Attorney General decided that the position of the nurserymen was right, and that there was no authority for such a ruling, so that trouble was done away with.

##### *State of Massachusetts*

The report of this Committee at the Boston Convention outlined some changes in the Massachusetts law, effective December 1st, 1912. We understand that these changes have gone into effect, and so far as your Committee is informed, the law is working smoothly and no complaints have come to the notice of your Committee.

##### *State of West Virginia*

During the last session of the West Virginia Legislature, a new law was enacted, regulating the shipments of nursery stock to West Virginia from other states, and the substance of their requirements is as follows:

##### *West Virginia*

First—A registration certificate must be obtained from the state auditor at Wheeling, W. Va. Fee for this certificate is

\$5, and the amount must accompany the application. On receipt of this certificate or license, the employer is authorized to furnish each of his agents a duplicate of the certificate. These duplicates can be made by the employer in his office.

Second—Permit tags must be attached to each and every bundle, bale or box of nursery stock shipped into the state. These permit tags can be obtained by addressing the state entomologist at Morgantown, W. Va., at the following prices, postpaid:

- \$1.00 per 100 tags
- \$2.00 per 500 tags
- \$3.50 per 1000 tags

Check must accompany the order for the tags.

Third—In addition to the permit tag furnished by the state entomologist, each and every bundle, bale or box shipped into the state must have attached a copy of the inspection certificate of the state from which the shipment originated.

This seems to be a fair and reasonable law, except as to the matter of license fee. It is an open question whether such a requirement is constitutional, but the amount involved is not large, and it is doubtful whether the Association would be warranted in contesting the law.

#### *State of Maine*

Your Committee was instructed to bring a case, testing the law of the State of Maine which provided for an agents' license fee of \$10 per year, such fee to be paid by the agent before beginning work, and, if the law were enforced, obliging payment by every agent before commencing operations, even though he made no sales. The law was tested, and the highest court in the State of Maine decided in favor of the nurserymen's position.

The substance of the decision was that business done through agents was not "selling goods" in Maine, but that the agent simply solicited an order which was sent to his principal in New York State for approval or rejection, and that if the order were accepted by the principal the actual sale was made in New York and not in Maine, and that as the law required a license for selling in the state of Maine it was not applicable to agents or nurserymen located outside of that state.

Another point was that the license fee was a tax on interstate commerce, and therefore unconstitutional.

During the last winter's session of the Legislature, the law was amended, or a new law passed, to get away from the unconstitutional features of the preceding law. The new law reduces the license fee to \$5 and makes it apply to agents "who sell or solicit orders in the state of Maine," and further provides that the fees received for licenses are to be expended for the purpose of inspecting nursery stock received in the state from other states.

It seems to be the opinion of our attorneys that any state has a right to inspect stock coming into it, and to charge a reasonable fee for doing so, and that the provision in the new law appropriating fees received for the purpose of inspection, does away with the unconstitutional feature of the previous law which was regarded as a tax on interstate commerce, and

that the application of the license feature to agents "who solicit orders in the state of Maine" gets around the other unconstitutional point in the previous law.

There is still one debatable section in the new law which excepts from the license provision "growers of nursery stock." The question is whether this exception would also apply to the agents of such growers. Our attorney's opinion is that this is a very close question, and one which might be decided either way, and as the license fee is small and the law otherwise not very objectionable, it is doubtful whether it would be wise to incur the expense of another test case.

#### *State of Pennsylvania*

Within a few days I have received copy of a bill introduced in the Pennsylvania Legislature in March, 1913, which is intended to provide a method whereby the planter or grower in Pennsylvania may be protected from damages resulting from planting trees untrue to name. In substance, the law provides that any nurseryman may file with the Secretary of Agriculture a bond of \$2,000 or more, which bond shall be held for indemnity in case any grower can show that he has been damaged by falsely labeled trees, and if he can show such damage he will be entitled to \$1.00 per tree for each year between the date of planting and the date of fruiting. It provides, however, that before such method goes into operation against the nurseryman that the purchaser shall have informed the seller, before buying, that he wishes to buy in accordance with this indemnity plan, and at the same time the buyer must inform the secretary of Agriculture of the number and kind of trees that he has purchased, and the name and address of the nurseryman. It is then the duty of the Secretary of Agriculture, provided the nurseryman has filed such a bond, to furnish the nurseryman, at the expense of the purchaser, with indemnity tags, to be placed on the trees when they are shipped to the purchaser, and when the purchaser receives the trees and plants them he is then to remove the labels and attach them to a stake driven into the ground beside the trees and then within a week from the time of planting the purchaser must send to the Secretary of Agriculture, and also to the nurseryman, a chart of the orchard, showing the exact location of each tree; this chart to be checked up by an inspector of the Agricultural Department within six months from time of planting. When the labeled trees first produce fruit, if the owner doubts the accuracy of the labeling, he must notify the Secretary of Agriculture, who shall cause the bearing tree to be inspected, and if anything wrong is found in it the orchardist can bring suit and collect against the bond for an amount equal to \$1.00 per tree for each year since the original planting.

There is nothing in the law which compels the nurseryman to give bond or thus insure his trees, but the law makes it the duty of the Secretary of Agriculture "to report to all inquirers and make special published mention, at least once per year, of all nurserymen who shall take advantage of this opportunity to bond themselves in Pennsylvania, and no grower shall make claim for damages, under this act, who has not purchased his trees of a properly bonded dealer."

The last paragraph shows what they are trying to do. In plain English, they propose to establish a list of "good



nurserymen" and advertise such a list generally throughout the state, and warn their citizens that they must buy of the nurserymen represented in this list, otherwise they will have no redress, should varieties prove untrue, indirectly attempting to force every nurseryman to file a bond for fear he will be on the black list and unable to sell his goods.

The law provides that the nurseryman must attach official labels to the trees before sending them out. These labels must remain on the trees until the purchaser has planted them, then the purchaser may detach and fasten them to a stake driven in the ground near the trees, and then send a chart of his premises to the Secretary of Agriculture and the nurserymen, which chart is to be checked up and verified by an inspector at any time within six months from date of planting. We fail to see what protection the nurseryman has between the time the purchaser receives the trees and the date he sends the chart to the Secretary of Agriculture. During that time, he can mix up the labels, and the nurseryman has no guarantee that the labels and the chart agree with the labels as attached at the nursery. Certainly an unwise and dangerous piece of legislation, which if enacted would tend to drive every responsible nurseryman out of the state.

The bill is in Committee, and we are endeavoring to ascertain the prospects for its passage, but have no further information at this writing. Your new Committee should be instructed as to your wishes in this matter.

Respectfully submitted,  
WM. PITKIN,  
Chairman.

REPORT OF TRANSPORTATION COMMITTEE

Regarding transportation matters, your committee still believes the question of a Uniform Classification to be the most vital to the nursery interests at this time. In the railroad news of the *Globe Democrat* for November 1912, the following articles on uniform classification appeared:

"CHICAGO, ILL., November 14—Opposition to a bill now pending in Congress, the intent of which is to empower the Interstate Commerce Commission to enforce a uniform classification of freight rates throughout the country, was voiced at the annual meeting of the National Industrial Traffic League today. The Legislative Committee was instructed to use its influence toward preventing the bill becoming a law."

"ST. LOUIS, MO., January 25—The National Industrial Traffic League is urging shippers everywhere to work for defeat of the uniform classification bill."

On reading the above articles, we wrote Mr. R. C. Fyfe, Chairman Western Classification Committee who is also a member of the Committee on Uniform Classification and below is his reply reproduced in full:

"CHICAGO, November 25th, 1912, File RCF,  
MR. CHAS. SIZEMORE, T.M.,  
Stark Bros. Nurseries & Orchards Co.,  
Louisiana, Missouri.

My Dear Mr. Sizemore:

Referring to your letter of November 18th, beg to advise that I have no idea of what bill the National Industrial League have in mind opposing through Congress unless it is a bill which was presented in the fore portion of the last session, in which I think a representative from Missouri proposed that the Interstate Commerce Commission

within six months of that date compile a new classification, and that the carriers within the next six months put same into effect.

I do not think that you need to give any concern to this matter as the Interstate Commerce Commission, from what I know, do not care to be burdened with the making of a Uniform Classification and prefer to see the carriers continue the work that they now have under way.

Yours truly,  
R. C. FYFE, Chairman."

The articles show that quite a number of shippers are opposed to having Congress empower the Interstate Commerce Commission to make a uniform classification, and the letter from Mr. Fyfe will show that the committee does not believe that any such action is likely to take place.

During the last year, your committee has succeeded in having the Uniform Classification of nursery stock embodied in the Official, Southern, Western, and Illinois Classifications, and we believe that within the next year all of the other minor state classifications will adopt the same rulings and descriptions. The next step, and by far the most important along the lines of uniform classification, will be that of uniform ratings or scale of ratings. At the present time, the Official Classification makes trees in car lots 5th class and less than car lots rule 25, which is 15 per cent less than second class. The Western Classification makes car lots class "B" or 7th class, and less than car lots 3d class. The Southern Classification makes car lots 5th class, and less than car lots 3d class. The Illinois Classification has the same ratings as for Southern. To illustrate more plainly, we have produced below the class rates between several points in the country which show at a glance the different classification ratings:

	1st class	2d class	3d class	4th class	5th class	Class "A"	Class "B"
St. Louis to Denver ..	1.62	1.27	1.01	80½	63	74	56
St. Louis to Kansas City	60	45	35	27	22	24½	19½

	1st class	2d class	Rule 25	3d class	Rule 26	4th class	5th class	6th class
N. Y. to St. Louis	88	76	65	59	47	41	35	29

	1st class	2d class	3d class	4th class	5th class	6th class	Class "A"	Class "B"
Chattanooga to								
St. Louis . . . .	1.04	88	77	61	52	40	27	34

The committee on uniform classification have maintained up to this time it was not their purpose as yet to uniform the ratings, although the Interstate Commerce Commission have suggested same in connection with the uniform classification. However, from the change in the Southern Classification during the last year, that is, from 6th class to 5th class on carloads and from 4th class to 3d class on less than car load shipments, your committee on transportation are constrained to believe there is a quiet move on foot among the carriers to do more or less unifying the ratings than would appear at a glance. A careful study of the figures given above will confirm this belief.

If the carriers have in mind to make nursery shipments in car lots 5th class all over the country, the Association can readily see how the rates would be increased in Western Classification territory. First, take the rate St. Louis to Denver, which at present is 56 cents class "B". If that is set up to the 5th class of 63 cents it will make an increase

of  $12\frac{1}{2}$  per cent, or \$11.20 per minimum car. If the St. Louis to Kansas City rate is set up to 5th class, it will make an increase of 13 per cent. If the car rate from New York to California is set up to 5th class, it will make an increase of \$60.80 per car. If from New York to Spokane, it will make an increase of \$46.40 per car, and if from St. Louis to Spokane, it will be \$46.40 per car. The amounts vary all throughout the Western Classification territory according to distances and local rates involved.

Some of our Southern members have made more or less complaint account of the change in Southern Classification territory which considerably increased the rates, although the valuation clause of 3 cents per pound has been eliminated. To illustrate the change in Southern Classification and conditions surrounding it, we would call your attention to the rates specified above from Chattanooga to St. Louis. The 4th class rate was 61 cents, based on a valuation of 3 cents per pound, which valuation had to be the actual valuation of the stock, which all nurserymen knew was a false value, as hardly any nursery stock is of that low valuation. In new classification less than carload being 77 cents, it shows an increase of  $26\frac{1}{4}$  per cent. The old rate carload was 40 cents, based on the 3 cent valuation, while the new is 52 cents, an increase of 30 per cent. While the old classification was in effect, legally the only rate that nurserymen and railroad companies should have used was second class less than carload and 4th class carload, as the actual value of the stock shipped was far above 3 cents per pound.

To explain more fully about declaring a false valuation, desire to call your attention to rule 58 of the Interstate Commerce Commission which reads as follows:

"Upon an inquiry from a banking house whether it may lawfully declare a value of \$5,000 upon a package of negotiable bonds of the market value of \$10,000 and pay the express charges on the basis of the declared value, upon the understanding that in case of the loss of the bonds the express company will be responsible only for the amount so declared, it was held that a shipper falsely declaring the value of a package delivered to an express company for transportation violates section 10 of the act."

Also rule 295, as follows:

"Carriers may lawfully establish schedules of charges applicable to a specific commodity and graduate reasonably according to value. When such rates are published, shippers are entitled to the rate corresponding to the actual value of the property offered by them for transportation. Shippers are not entitled under such rates to understate the actual value of shipments for the purpose of obtaining the rate applicable upon articles of less value. The valuation stated to carriers should correspond with the actual value as shown by invoices, etc. Shippers misstating the value of property for the purpose of obtaining the rate applicable to property of less value are guilty of misbilling and are subject to prosecution under section 10 of the act to regulate commerce."

In view of the above, believe the nurserymen secured a very reasonable rate in Southern Classification when the railroads gave them 3d and 5th class accordingly. In view of the increase in Southern Classification territory, we believe that the nurserymen are now entitled to have carload rating stand as it is in the Western Classification territory, and when the time comes for making the same rating all over the country, believe if the transportation committee will watch the subject closely they may be able

to get 7th class in Official and Southern Territory, as the Official territory being the most productive and thickly settled can much better afford to go to 7th class than the nurserymen take 5th class in the Western, and the Southern can stand 7th class carloads, as they have gone from 4th to 3d class less than carload.

The following letter from the committee on Uniform Classification explains itself:

"CHICAGO, May 24, 1913.

MR. CHARLES SIZEMORE,  
Stark Brothers' Nurseries & Orchards Co.,  
Louisiana, Mo.

Dear Sir:

Referring to your letter of May 9th.

For the present, as you know, the duties of this committee are limited to the preparation of uniform rules, description of articles, package requirements and minimum carload weights. I have no information as to when the duties of this committee will be enlarged to include the preparation of recommendations covering uniform ratings or scale of ratings.

Yours truly,  
E. K. VOORHEES,  
For Committee of Uniform Classification."

However, regardless of what letter states, and as before stated, your transportation committee believes they are doing considerable unifying of the ratings.

Western Classification No. 51 did not make any provision for apple and tree seed not otherwise specified except first-class, any quantity. Your committee took this question up by correspondence with result that supplement No. 6 to said classification, effective March 31st, which gives a rate on tree seed L.C.L. 3d class and carload 4th class.

The investigation of the express companies and their methods by the Interstate Commerce Commission has led to some very important changes in their method of billing and handling shipments which is a benefit to the shippers. The express companies are now billing through to practically all points and a copy of the waybill is attached to each package, which prevents shippers from paying charges which have already been prepaid. In addition to this, the express companies are sending circulars to all of their shippers which read "inspect your labels." On the circular it states yellow labels, and instructs when a party receives an express package bearing a yellow label, for him to pay no charges, as the charges have already been paid by the shipper. White labels show that charges are to be paid by consignee, and if a package is received with no label, for the party receiving it to pay no charges, and collection, if any, will be made thereafter. The above system has been adopted by the express companies per the order of the Interstate Commerce Commission.

BILLS OF LADING: Your committee again desires to impress upon the nurserymen the importance of having weights shown in each B/L and to mail the original B/L for each shipment to consignees, as they will help consignee trace shipment from his end of the line and to check shipment properly on arrival.

During the year, several of the members have complained about receiving trees billed as dormant which were changed by the agents to not dormant, thereby causing the payment

of higher freight, but every case called to the attention of the transportation committee was investigated promptly and advice received from complainant stating the carriers had made the necessary correction, therefore, presume that by another season no trouble will be experienced on account of the dormant and not dormant feature, especially if all nurserymen will have their Bs/L printed to read dormant trees, dormant shrubbery, etc.

There also was some complaint about carriers claiming according to the new classification all nursery stock had to be prepaid. While it is true in the body of all of the classifications it states nursery stock and shrubbery prepaid, there will be found a rule in the front of each one of them which allows shipments to go forward collect with charges guaranteed as formerly, and should any of the nurserymen hereafter have trouble along that line, would suggest that they call their agents attention to the rule as referred to.

**DELAYS:** Some complaints have reached the transportation committee regarding the serious delays that have occurred on their shipments, and the F. W. Kelsey Nursery Company, New York City, state their shipments have been delayed more than usual this season and request that the matter be brought before the association at the Portland meeting. The transportation committee will be glad to assist any of the members wherever possible along any lines, but would suggest that each shipper, as far as possible, endeavor to look after his own shipments and keep as close a tab on them as his facilities will permit.

McHutchison & Company, New York City, desire that the transportation committee take up with the carriers the question of a better rating on Bay trees, claiming that with a lower rating they would be handled more extensively. Bay trees, less than carload, shipped in tubs with tops protected are double first-class as compared to fruit trees and other nursery stock dormant shipped in bales, first-class. The carload rating on Bay trees is class "A", while on dormant trees and shrubbery is class "B", therefore, in view of the fact that Bay trees are of such higher value than the ordinary run of nursery stock, your transportation committee does not believe the carriers would be willing to make anywhere near the same rates on them as govern the dormant nursery stock, but if the Association desires that the question be taken up, your committee will be glad to do so.

In conclusion, believe the above will in a general way give to the Association an idea of what has taken place during the past year and of what may take place, or is in store for the nurserymen during the next two or three years, especially in the way of uniform classification of rates. This question should be watched very closely, as when the time finally arrives for the same rating, on nursery stock throughout the country, that the nurserymen will get as equitable rating as they are entitled to. Of course shippers throughout the country will endeavor to get the rating which will make them the lowest freight rates, while on the other hand, the carriers from the same principal will endeavor to secure the rating which will return them the most revenue.

Respectfully submitted,

CHAS. SIZEMORE, Chairman.

## REPORT OF THE MONTANA COMMITTEE ON LEGISLATION

By D. J. TIGE of P. C. A. of Nurserymen

At the last meeting of the Montana Legislature, two laws were passed that effect in some measure the business of the nurseryman.

One provides that the Governor shall by proclamation prohibit the importation of nursery stock, seeds and, etc. (except under such restrictions as he may deem proper) from localities in another state, territory or country, when he has good reason to believe that any pest or disease, dangerous to the horticultural or agricultural industry exists in such localities.

The second provides that any agent who solicits orders for a nursery not holding a Montana license, shall first secure a license and file a bond with the State Board of Horticulture.

Both measures were introduced in the Legislature by a member of the State Board of Horticulture and neither was objected to by the Montana nurserymen's committee on legislation.

The measure providing for quarantine of certain localities had the full approval of the nurserymen, the measure requiring a license and bond from an agent was thought to be open to the same objection as the law already in force requiring a license and bond from a nursery, viz.: that as an interference with interstate commerce the courts will probably decide that it cannot be enforced as against nurseries located outside the state or their agents.

However, the measure did not seem particularly objectionable or important and as our friends of the State Board of Horticulture seemed to set great store by it, the nurserymen did not oppose its passage.

A matter that your committee believes to be of much importance, was the refusal in the early part of the shipping season by the Billings Inspector, acting under direct instructions from the State Horticulturist, to issue a certificate of inspection for a car load of nursery stock shipped from the Mount Arbor Nurseries of Shenandoah, Ia., to a nursery at Billings, until a license fee of \$25.00 should be paid by or for the Mount Arbor Nursery.

The goods in question were delivered to the consignee, a regularly licensed Montana nursery and were inspected and passed by the local inspector, after which notice was given that an inspection certificate would not be issued until a \$25.00 fee, plus the regular inspection fee, was paid by somebody to the inspector.

Peter Youngers, chairman of the Legislative committee of the American Association, promptly wired his attorney, W. M. Johnston of Billings, who brought an action in the District Court to enjoin the horticultural authorities of Montana from collecting license fees or requiring bonds from foreign nurseries, and asked the Court for an order compelling the immediate issue of a certificate of inspection covering the car load of stock in question.

The court gave the desired order, thus making the stock available for use pending a hearing and decision in the injunction case.



That the full significance of this action on the part of our State Horticulturist may be understood, let it be borne in mind that about a year and a half ago the Montana horticultural authorities notified the Mount Arbor Nurseries that a license fee would not thereafter be required from any nursery located outside the state of Montana, that in the meantime there has been no change in the law relating to such matters; the nursery has had no notice of any change of practice in this regard and has made many shipments into Montana for which no fee (except the usual inspection fee) was paid or demanded.

Let it also be kept in mind that some years ago our State Board of Horticulture stopped the practice, then inaugurated for the first time by our present State Horticulturist, of collecting a license fee on goods shipped to licensed nurseries in the state and no notice has been given to Montana nurserymen that this ruling of the Board has been reversed.

Prompt action on the part of Mr. Youngers and Mr. Johnston alone prevented the success of this attempted holdup by the Montana Commissioner of Horticulture.

The word holdup is used after due consideration to accurately describe the action of our commissioner in this case and its accuracy will not be affected in any degree by the decision to be handed down by the court in the injunction case brought by the attorney for the American Association.

It is not at all probable that our commissioner expected or desired to have the Mount Arbor Nurseries take out a license, which would mean the payment to him of only \$25.00 for all the shipments that might be made into Montana by this firm during the year covered by the license. It is highly probable that he did expect and desire to collect this \$25.00 fee from the consignee of this shipment and a like fee of \$25.00 from each and every other consignee of any shipment of importance that this firm might make into Montana during the season, and if successful in this case, may we doubt that for every considerable shipment made by an unlicensed nursery into Montana during the season just closed, some one would be compelled to pay to our State Horticulturist the sum of \$25.00?

It does not seem unfair to assume that our commissioner knew he had neither legal nor moral right to demand this fee, unless we suppose that he acted on the theory that a nurseryman is always legitimate prey for a horticultural official. We may also safely assume that it was taken for granted the consignee would promptly pay the \$25.00 to secure the certificate of inspection required by the Montana law to make the goods available for filling orders.

The courts decision in the injunction proceedings referred to above has not yet been handed down but it is expected in the near future. It is thought, however, that no matter what the decision, the losing side will appeal the case to the Supreme Court.

We cannot too highly commend the prompt and effective action of the American Association through its legislative committee in this case, as an effective method of dealing with an unscrupulous and irresponsible official.

Acting as individuals the nurserymen would be helpless to prevent extortion along the lines attempted in this instance.

Where one could or would resist the holdup, many would have no choice but to pay the money demanded, to prevent a loss of hundreds or thousands of dollars which might result from even a few days' delay in getting the stock required to fill their orders.

And bear in mind that no matter how flagrant the wrong that might be done to the nurseryman in the manner described, after the damage was done he would have no legal remedy.

In this case, as in many others, the official in question is under no bond and it is not known that a personal judgment against him would be worth more than the paper on which it was written.

## REPORT OF THE JOINT COMMITTEE ON UNIFORM HORTICULTURAL LAWS

We, the members of the American Association of Nurserymen and the Pacific Coast Association of Nurserymen, realizing that the multiplicity of state laws governing the control of injurious insects and diseases on all classes of horticultural products are often a menace; and realizing that these laws govern particular areas of the country which have a diverse horticultural production, and differing conditions of soils and climate; and inasmuch as it is a well settled fact that depleted soils invite enemies, such as insects and diseases, fungus and bacterial elements (which is in accordance with natural laws provided for the elimination of all unfit plant life); and realizing that the growing of horticultural products and their free exchange between one section of the country and another is often retarded, hampered, and in many cases made unprofitable and prohibitive under much of the legislation now in force in the several states; and realizing that it is of the utmost importance that all horticultural products should be as free as possible from injurious insects and diseases, which have at times resulted in diverse, drastic and in some cases in unjust conditions for the free and equitable exchange of horticultural products of all kinds; therefore,

It is recommended by this joint committee, representing in its personnel the American Association of Nurserymen and the Pacific Coast Association of Nurserymen, that both organizations proceed to provide moneys (to be known as the "Horticultural Improvement Fund"), by a voluntary contribution not to exceed twenty-five dollars from the firms in both Associations, or others interested in horticulture; said contributions to be made within ninety days from the date of this notice, and payments to be made to the Treasurer of the American Association, for the express purpose of providing ways and means to secure uniform horticultural laws, as between one state and another, which in our judgment is only feasible by the appointment of a committee whose duties shall be to secure copies of all horticultural laws now in force in all the states and territories of the United States; and to make a digest of the same, to

the end that there shall be evolved and created out of this investigation and study a law that shall develop, foster, conserve and protect all the interests of horticulture in all its several divisions, and which shall have the support and indorsement of horticultural officers and all the horticultural industries of the several states. And we further recommend that this convention adopt this report and proceed to carry out its provisions by the appointment of a committee of three, which shall consist of one member from the Atlantic Coast, one from the Mississippi Valley region, and one from the Pacific Coast, with full power to utilize this fund as in their judgment shall be deemed necessary. And it is further recommended that this report be placed upon the records of both organizations.

All of which is respectively submitted.

PETER YOUNGERS,	P. A. DIX,
HENRY B. CHASE,	M. McDONALD,
J. B. MOREY,	S. A. MILLER,
A. W. KIRKPATRICK,	GEO. B. ROEDING,
C. M. PETERS,	F. A. WIGGINS.

### REPORT ON TARIFF

Your committee on tariff beg leave to present the following report:

After a good deal of correspondence and consultation, it was decided that we should present as strong an argument as possible in favor of keeping the rates as they were in the last Tariff Act, and that especial emphasis be laid on retaining the specific features which had worked out so satisfactorily under the Payne Bill.

A Hearing before the House Committee was arranged for, which was attended by Messrs. Pitkin, Meehan, Dayton and the Chairman. This was fortunate, as no hearings have been held in the Senate, except before a sub-committee, and from present appearances no changes are likely to be made. The Bill, as passed by the House, cuts the rate on trees and nursery stock from 25 to 15 per cent and on apple, pear, quince and St. Julian stocks reduces the rate from \$2 per thousand to \$1 per thousand. It leaves the rates on roses, rose stocks, Mahaleb, Mazzard and Myrobolan the same as in the Payne Act.

If the Bill is not changed in the Senate, and the chances are that it will not be, your committee feel that the trade generally has fared better than was expected and better than other more important schedules which could, and did, bring much greater influence to bear.

This result was largely due to the fact that there was no division in the ranks of the nurserymen. Those good Democrats who believe in a Tariff for revenue only kept quiet and allowed your committee a free hand, and while the result is not all the high protectionists wanted, the nursery schedule is certainly a fair proposition, and we believe will be satisfactory to the trade generally.

For the Committee,  
IRVING ROUSE, Chairman.

### REPORT OF MEMBERSHIP COMMITTEE

Our report of what the Membership Committee has accomplished shows in the Badge Book. The 1912 Badge Book listed 363 members in good standing, the present one lists 463, a net gain of 100 members. Our campaign brought in 120 members, at an expense of \$161.94 or 27% of the proceeds. Several new members have been booked since the Badge Book went to print, so that the total membership in this organization is now around 500.

In my opinion, the founding of a membership Committee by our President is a large step forward and I strongly recommend its continuance. There should be a continued organized effort to increase the membership of this organization; you require a live wire in charge of this Committee, a man who is not only willing to undertake the task, but has the ability, the clerical equipment and who has access to a mailing list that includes every nurseryman in the United States and Canada worth while.

Every nurseryman in the United States and Canada not now a member, should be persistently invited to join. As soon as a man or firm starts in the nursery business, their attention should be called to the advantage to be derived from membership in this organization, and that policy should be followed until this organization has, at least, 1,000 members. All nurserymen enjoy the benefits of the work done by this body and all should be willing to pay membership dues as their part of the expense.

My campaign was based on three circular letters; the opening letter outlined the objects and purposes of the organization; it told of the good and effective work the different Committees were doing, and had done; it showed why it was the duty of every live nurseryman to support this work by becoming a member and concluded by extending a personal invitation to join. That letter went to 2700 nurserymen non-members.

Then I organized a sub-committee of 34 members, young Nurserymen, mostly friends of mine. They were selected as representative men located in Nursery centers, who I knew would work hard for the cause; I sent each of them a copy of my first letter and enclosed 25 application blanks, asking each of them to write to 25 nurserymen friends in his district. Their work is herewith acknowledged with thanks.

My second letter was short, but to the point; it emphasized the advantages of membership and brought out what they missed by not being members. This letter went to a selected list of 1100 names, as I had cut from my list the smaller firms.

As the first two letters had exhausted my stock of arguments and appeals, the third letter was founded on this little story—"What a willing pair of horses you have," said Farmer Jones to Nurseryman Smith, "Yes" said Smith, "One horse is willing to do all the work and the other is willing to let him." This letter went to a boiled-down list of 600 names. They must have seen the point because that letter pulled in 37 new members.

In every one of the 4800 letters sent out, an addressed envelope and application blank was enclosed, every application was accepted by a personal letter, welcoming the new

member, an official receipt was enclosed and the new member was then told where the Convention would meet, with an invitation for him to be here with us at this session. This campaign involved a large amount of correspondence, all inquiries were answered promptly and some of the replies were amusing: One nurseryman from Ohio said he was glad I was forming a Nurserymen's Association, for it was badly needed. He didn't send his \$5.00 though. I wrote him five times but I never got it. I guess the shock he got from my reply killed him.

Another nurseryman in Wisconsin sent a seven page letter; I had to take it home over Sunday to get a chance to read it. He said there was a surplus crop of 37 million barrels of apples in the country this season, and the nurserymen were to blame. They were a lot of stinking tree peddlers anyway and he wouldn't join. I told him that as his letterhead showed that the growing of apple trees was his specialty, he was—at least—partly to blame for the surplus; that Apples had been eaten ever since Eve gave one to Adam in the Garden of Eden, and that the demand for Apples and Eves was still on the increase. He sent me a 12 page reply, which I haven't had time to read yet, anyhow he didn't enclose his \$5.00.

Another man said he wouldn't join because he had been turned down for membership in the Protective Association. He said his credit was good and that he wouldn't join the Association unless I promised to get him elected to the Protective Association. He's still a non-member.

If you get a real live member to carry on my work—as I hope you will do, he will be kept pretty busy, but whenever you want a thing done—and done right, go to the busy man—the other kind haven't time.

Respectfully submitted,  
JAS. McHUTCHISON,  
Chairman Membership Committee.

## A FLYING TRIP TO STORRS AND HARRISON'S NURSERIES

The electric cars which parallel the New York Central pass right through the nursery. Getting off the car we were met by the genial John Dayton. Passing through the service yard of this big concern, which contains its packing sheds, storage cellars, stables, implement houses, greenhouses well arranged for handling their large diversified business, we came to the offices, where we were duly introduced to Mr. George.

'Tween seasons in a nursery office is not like a stock exchange in session. "How's business been the past season, John?" "Pretty good in ornamentals, we got caught in the slump in fruit stock, especially apples. We knew it was coming, but, like the rest, did not know when to get from under."

"Planting is pretty well in hand, although we could do a lot more if it would rain. Stock that has been planted needs it bad."

"Here's the rig if you would like to take a run through the nursery."

"That is a fine stand of young Planes." "Yes, the late frosts did not seem to hurt them. I hear Tom Meehan had a block badly nipped."

"My, but S. & H. grow some Roses." "Yes, we have about 700,000 stocks planted and if rain comes soon it will be a good stand."

"George, that is the best stand of Apples we ever had." "Yes, and Peaches are in pretty good shape."

"What acreage have you, John?" "Oh! about 1500 acres, some of it gets tree tired and we put it down in rye and clover. Cutting the rye before it is ripe for baling straw it is much tougher and better than straw upon which the grain has ripened; then we get a crop of clover to plough under to bring the ground back in shape."

"Currant layers don't look very good." "No, they are worse than the Gooseberries and there is not enough of them to count." "What is the trouble?" "Late planting, I guess."

"That is a pretty block of Berberis Thunbergii." "Yes, wish it was ten acres."

"That block of Silver Maples looks prime, pretty even two inch stock." "Yes, that is our best tree."

"What are you doing with so many Aralia spinosa? Is there a market for them?" "There will be by the time we have dug them up and put them on the dump."

"Frau Karl Druschki Rose is a good thing." "You bet. There is no 'next best' in the white H. P."

"Pæonies made a poor show at Cleveland last week." "Yes, I think the late frosts got them. Martin Kohankie showed a good vase of Jules Elie. Did not see anything in the novelties that showed up very strong. Pity it's such a poor show flower."

"You will be in the market with Gingko one of these days by the looks of that young stock."

"Your soil seems to be uniformly good. There does not seem to be many poor spots." "Well, we have some and some wind from Canada that is the real thing for stripping the peach buds, but nothing develops character like adversity in trees as well as men. That accounts for the sterling character of nurserymen in general." "Smoke?" "Thanks." John reflectively "Some nurserymen must have had a soft snap."

"You grow a great quantity of Chestnuts, evidently the blight has not reached this country yet." "If we don't find the blight soon it won't be because the inspectors have not looked for it. They are almost camping in the Chestnut blocks."

"That is a splendid block of young evergreens."

"Isn't that a glorious color in those Golden Elder?"

"What is that blue streak over there?" "Anchusa Drop-more variety."

"That is quite a bunch of perennials. Hardly thought you would have got your nursery in such good shape so soon after shipping." "We usually figure on getting cleaned up by the Fourth of July. It is pretty hot and dry."

"If you gentlemen have a nurseryman's constitution maybe you would like to sample our poison well. Although there was a barrel of bug poison put in it when it was first made it is more wholesome than Convention Cocktails."

"Look out for the cars. Here is where Skidelsky nearly got killed."

"Good-bye, John. Good-bye, George. You have a great nursery!"



## The Workings and Results of the New Federal Horticultural Law as It Relates to the Growers, the Importers and the Nurserymen

"The Plant Quarantine Act"—which forms the subject of this paper, went into effect October 1st, 1912, and from that date, no nursery stock can be imported into the United States without a permit from the Department of Agriculture. The enforcement of this law is in charge of the Federal Horticultural Board—a body organized for that purpose, and every importation is made subject to the Rules and Regulations laid down by the Government officials comprising this board.

Now, I want to tell you why the Department of Agriculture insisted upon the passage of this law, why it was persistently introduced into Congress in various forms and different titles for several years, and why the Nurserymen just as strenuously objected to its passage.

The Act was not primarily aimed at the Nursery business. The Department wanted the power to protect the country by quarantining against the "Mexican Fruit Fly," the "Potato Wart," the "Date Palm Scale," the "Mediterranean Fruit Fly," and other pests, which few nurserymen ever heard of, and which do not appear on nursery stock. They also wanted the power to regulate Interstate Commerce, and prevent the shipping of nursery stock without proper safeguards from the Eastern States affected with the Brown-tail and Gypsy moths to other states not affected by these pests and to prevent the importation of Pines, which might constitutionally be affected with the "White Pine Blister Rust." These six quarantines are the only ones in effect up to this date; the last two only affect the nursery business.

The nurserymen objected to the passage of this law because they assumed it was aimed at them and their business. They never objected to proper inspection, but they did strenuously object to any Government officials having the right to quarantine their out-going or incoming shipments. They also objected to the clause which gave Bureau officials the power to make later Rules and Regulations for the carrying out of the Act, because this gave these officials absolute and dictatorial control over the nursery business. As much of their raw material cannot be produced here, but is imported from properly inspected European Nurseries, the nurserymen and florists wanted no red-tape restriction or quarantine placed on their importations. They felt that the multiplicity of State Inspection laws, the requirements of permits and licenses to do business in different States were harrassments enough and instead of adding one more law, they wanted the Federal law, if possible, to include and replace the many conflicting onerous State laws in force. They felt that the laws should be rendered less rather than more burdensome, and that as Nurseries—foreign and domestic—were necessarily the really clean reports in the vegetable kingdom, all subject to rigid inspection, their business should be protected rather than harrassed by Federal laws.

In spite of all protests from the Legislative Committee of this Association and individual members, the Act became

law last August. Do you know what this means? It means that if you contract with a French firm for your supply of seedlings, your raw material—the Government can clap a quarantine on the Frenchman in December, and prevent him from shipping them. You are no better off if you import seeds to grow the seedlings yourself, because the Government has the same right to quarantine against the seeds and even if you get your seeds and grow your seedlings, the Government still has the right to quarantine your State, your town, or your nursery and prevent you shipping out those seedlings after you have grown and sold them. The law gives the Government the same power and control over all nursery shipments, import or domestic.

No American nurseryman can see a case or bale go into Interstate Commerce, and no Foreign shipper can ship a case or bale to America with any assurance that some of the infinitude of details have not been overlooked and will result in the loss of the stock. The restrictions which surround the shipment of nursery products are so complicated, that the employees of Transportation Companies, which also are amenable to the laws, do not know whether or not the exactions have been fully met and are apt to hold up the shipment to make sure.

Fortunately, the Federal Horticultural Board, which is charged with the enforcement of this law, is at present composed of five practical men—men who will not deviate from their duty to their Department and Country as they see it, but yet are always ready to listen to protests, to suggestions and are willing to co-operate with the object of making the operation of the law as little burdensome to nurserymen as possible. Professor Marlatt is Chairman of the Federal Horticultural Board; he really was the father of the Plant Quarantine Act, and I am convinced if he knew as much about the nursery business—as a business, and its volume, when he wrote this Bill, as he does now, many of its unnecessary and most drastic features never would have been incorporated in the Act.

The Act finally passed August 20th. This was just at the commencement of the shipping season; in fact, large shipments of *Azalia Indica* were then on their way across from Belgium. You can imagine in what a bad fix the New York Import houses were in with over a million dollars worth of orders for stock embraced by this Act, on their books. As Secretary of the New York Importers' Association, I called a special meeting of that body—sending a representative to Washington in the meantime, with orders to stay there and when two delegates from the Importers' Association got to Washington—we found that the Rules and Regulations were already promulgated and in the Government printers' hands. They were so drastic and impracticable that had they gone into effect as they were, it would have meant a calamity to the European and American nursery business. We had the printing stopped; got the Federal Horticultural Board

together in a hurried meeting; arranged for further hearings—the Board courteously listened to our protests, suggestions and arguments—the result being that the Rules and Regulations were much modified in essential particulars before they appeared in print.

The Board also promised to further modify their Rules and Regulations, if any features were shown to be unnecessary or valueless. They have kept that promise and many minor but burdensome clauses have been further modified since then.

Here, I want to say that I left New York, May 17th, I wrote my paper on this subject before I left—it contained nine new recommendations of changes. I sent a copy of that paper to the Board, as promised, and since then they have adopted five out of those nine recommendations, and those changes are included in the new Rules and Regulations effective July 1st, 1913. This made it necessary for me to write a new paper. I mention this to have you excuse any shortcomings in this paper, which was written in spare moments during the past few days, without the assistance of much data which I have in New York.

Here are a few of the important changes in the new Rules and Regulations effective next July 1st.

(1) No consulated declaration need now accompany the shipment; a certificate taking its place; the certificate on package to be a fac-simile of the parent certificate.

(2) The application for permit need not now state quantity and classification of any nursery stock except Pines; this eliminates one of the most important burdensome features.

(3) Instead of the 200 customers of John Jones of Angers, France, getting permits, the New York agents of John Jones can now get one permit to cover those 200 consignments.

(4) In case of complications at the New York Custom House, the broker can now have the official red tape unravelled by a representative of the Board at New York, instead of having to take up the matter with Washington as heretofore.

You will see from this that the Rules and Regulations are gradually being licked into shape. The Act is now in fairly workable condition, but in four clauses, the Rules and Regulations are still unnecessarily burdensome. I will point them out and show why they are unnecessary in my opinion.

(1) Regulation 2 still includes "Fruit pits and other seeds of Fruit and Ornamental Trees or Shrubs." The Board refuses to eliminate these seeds from the provision of the Act, saying that they are frequently carriers of dangerous insects. They say that Apple and Coniferous seeds are commonly infested with a Chalcis or four winged fly, which is dangerous to the Apple crop. This may be all true, but I do not see why it should be necessary to secure a permit to import, say, a bushel of Mahaleb Cherry seeds; why every package should be marked with the permit number, the shippers and consignees names and addresses, the locality where grown, by whom inspected and the date, etc. All this is mere red-tape formality, yet if it isn't complied with, you cannot get possession of your seeds. Only recently we had a shipment of seeds released in New York, that had been held up for seven weeks, because it lacked a certified declaration.

The American Consul, who consulated the Invoice apparently didn't know of this Law, and the Transportation Company, which had the shipment in charge at New York didn't know how to unravel the red-tape. If we had not got on the job, the seeds would probably still be in the bonded stores at New York at the Consignee's risk and expense. Seeds that are free from suspicion of pests, should be as free from the provision of this Act as Vegetable or Flower seeds.

(2) Without doubt, the most arbitrary, unnecessary and objectionable regulation is Number 6, which provides that entry will be refused unless each case, bale or package is plainly marked to show the permit number, the quantity and contents of each package, the locality where grown, the name and address of the shipper and consignor and a certificate of inspection. Considering that all import packages are shipped by marks and numbers, why is it necessary to state on the package the shippers and consignor's name and address? The notification the Customs broker makes to the Board and the State Entomologist gives this information; the permit identifies the package. Why is it necessary to state the contents on the package when the Department already has that information? On a shipment of say, 3,000 Bay Trees, each in a separate package, why is it necessary to place a label on the outside of the tree saying "This is a Bay Tree." This regulation raised the price of Bay Trees 10 to 20% in Belgium on exports to America.

Now that I have shown you how unnecessary this regulation is from the Department's point of view, I am going to show you its injustice, from the point of view of the New York Import house, which represents a Boskoop, Holland firm. There are 800 nursery firms in Boskoop—all hungry for American business. We spend money for traveling expenses and advertising to work up a business for our Boskoop firm; the customers we get are ours, bought and paid for, but this regulation takes them from us.

All cases as packed are placed on the banks of the main canal at Boskoop, so that the steamer can pick them up for Rotterdam, and the other 799 Boskoop Nurserymen including those who never spent a dollar in America, can read from the cases, not only, the name and addresses of our customers, but what they buy from us. Is that just? Is it fair to those progressive American import firms, which have just about Americanized the foreign business?

For another illustration, let us take English Manetti stocks and English Gooseberries, which are grown by many people, but only in small quantities—the New York agent has only two ways of handling this business—either he must represent one English firm and do a very small business, or he must get many growers to grow for him. Our firm follows the latter course, because it gives us control of the source, the quality, grading and cleanliness. It is harder to get good shippers than good buyers. It costs us time, money and brains to get those growers to grow the right kind of stock for us; those English growers' names are our property, bought and paid for. Those Customers' names and addresses are our property, bought and paid for—why should our Government, instead of protecting our American industry, compel us to give to our shipper our customers' names and addresses and to our customers, our shippers' names and addresses. Is

this just? Is it fair? No, it is unjust, it is unfair and it is unnecessary too.

(3) Regulation 6 also covers the inspection periods, as from October 1st to May 31st. This does not cover the shipping dates on Belgium stock, which are from August 15th to November 1st. The best shipping month for Azalea Indica, Araucarias and Bay Trees is September and the growers must ship all they can in that month to get the stock here before frost and in time to force for Christmas sales—the date should be changed as applied to Belgium shipments.

(4) Regulation 8 provides that if a custom broker fails to advise the Federal and State officials of the destination of each package, etc., his permits can be cancelled. I think this should be corrected by prefixing the word “knowingly” or “persistently,” unless this is done, a broker could be severely punished for the mistake of a Government employee and have no redress.

To get a consensus of opinion from European firms, I inquired of ten of the largest French, Holland and English shippers, as to their opinion of the law. Nine of them said—it made the business of exporting to America exceedingly difficult; that the stock in European nurseries was as clean as nursery stock can be, and that the additional requirements—together with the Custom House requirements, would tend to increase prices on stock exported to America, and only the largest firms could comply with the regulations. None of these nine saw any gain to Americans in the law, as the stock was clean anyway and no number of additional certificates, documents or tags, would make the stock cleaner.

One firm was satisfied with the law because it made it most difficult and risky for small growers to export to America. He significantly added. “Your country would greatly benefit, if your legislature took a long holiday—we are getting too much legislation.”

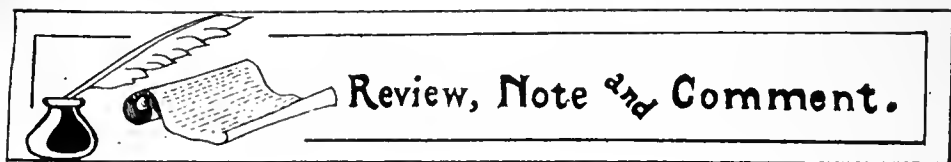
My own opinion is that the enforcement of the Act will do some good in making the Foreign inspection service still more exacting, but as the American importer pays for all this in increased prices, I do not see where he is getting over ten cents worth of increased protection for every dollar it costs him.

In conclusion, let me say that the thanks of this Association is due to such men as Thos. B. Meehan and William Pitkin, who have worked unceasingly in the interests of the nurserymen in these matters and to whom should go the credit in a large measure for the present workable condition of this law—the most important and drastic one the nurserymen have ever been up against.

Your thanks is also due to the chairmen and members of the Federal Horticultural Board, who have courteously considered every recommendation we have made and who are ready to eliminate any burdensome claims from the Rules and Regulations, when they are shown to be either unnecessary or valueless.

I thank you, Gentlemen.

J. McHUTCHISON,  
17 Murray Street,  
New York City.



Mr. H. D. Simpson, of the Knox Nurseries, Vincennes, Ind., Mrs. Simpson and daughter Mary Elizabeth and Miss Anna L. Simpson started on a trip to Europe, sailing on the Saxonia, June 12th.

### A NEW GRAFTING MACHINE

Alexander Robertson, Harrison Hot Springs, B. C., Canada has been granted a United States patent for a Grafting Machine.

Illustrations show that it comprises a revoluble planer, from the ends of which knives project.

These knives are set diagonally, and as the scions or grafts are inserted along the guides, against the end faces of the rapidly revolving planer, the projecting knives gradually pare the wood to the desired bevel without bruising it in any way. The splice thus formed is absolutely true, thus insuring perfect contact.

One machine only has, so far, been built, and its first trial demonstrated that grafts could be made at the rate of 6000 per day of ten hours. If desired the machine can be operated from both sides, thereby doubling its capacity.

Otto Heinecken returned from Europe, where he obtained, besides the agencies of J. Heins' Sons, Halstenbek, that of E. Neubert, wholesale expert grower of Lilies of the Valley and potgrown Lilacs for forcing, Wandsbek, furthermore the agency of A. Keilholz, Quedlinburg, Germany. Mr. Heinecken will start his annual tour through the United States and Canada this week, during which time his brother, F. Heinecken, will answer all inquiries and applications for quotations, etc., from headquarters at 17 Battery Place, New York, where the office is connected with the well-known firm of Dietrich Heydemann, International Forwarder and Custom broker.

The Phoenix Nursery Company, Delavan, Wisconsin (a corporation) was started by a Mr. Phoenix the father of the Fred Phoenix who owned the nursery at Bloomington. These two nurseries were never connected and about 17 years ago Mr. Phoenix sold all interest in the nursery which at that time grew fruits mostly.

They now have 31 acres mostly ornamental trees and shrubs and perennials and do a fair business both wholesale and retail being situated near lake Geneva. F. B. Stowe is president and 95 per cent stockholder.

Please find enclosed check for \$5.40 to balance my account for advertising. I was well paid for the amount invested in advertising in your paper.

I have sold a half interest in my nursery to Mr. U. E. Thurmond of this place and our firm will be known as Norton & Thurmond.

Clarksville, Mo.

Yours truly,  
ARTHUR L. NORTON.



## BETWEEN THE NURSERYMAN AND THE FRUIT GROWER

Paper Read by LLOYD C. STARK, Louisiana, Mo., at the Portland Convention

The past two or three generations have witnessed great changes in all lines of business and in all walks of life. The nursery and orchard business is no exception. It has not been very long since the fruit tree agent was a laughing stock, and the nursery business in general occupied a very much lower level than it really deserved.

*Nurserymen assist orchardists:* Of late years there has been a strong tendency among leading nurserymen to get in closer touch and co-operation with orchardists. In the old days the transaction was closed as soon as the trees were delivered and paid for. No particular criticism here—the buyer got his trees, the nurseryman his money—everything about the deal was perfectly honorable and legitimate. However, right here the nurseryman lost an opportunity, he should stand by his customers, both big and little by not only furnishing him the trees but by assisting him in bringing them into profitable bearing orchards. This statement is truer as regards the amateur and the small orchardist than the commercial orchardist. Nevertheless, in our Company, we are going on the assumption that every man who buys our trees is entitled to all the assistance we can give him, even assisting him in marketing his product.

In our efforts toward co-operation along this line, we have established what we call our "Special Service Department." The men who handle this correspondence and assist customers who apply to this Department, cost us a lot of money every year, but we believe it a paying investment and good advertising, aside from the moral side of the question. Whenever a man plants Stark Trees, and is successful with them, he is not only going to be a walking advertisement for our nursery, but he is also going to be a booster for the great cause of horticulture. If he grows a good profitable orchard his example and influence will help every nurseryman and orchardist in America, for just so long as the majority of orchards are handled on profit-paying basis, nurserymen everywhere will enjoy a good business. From a purely mercenary standpoint, we do not believe that the nurserymen necessarily owe this to the customer, but we do believe every good American citizen owes it to his country to assist, as far as possible, in conserving the resources and increasing the productiveness of this great land of ours.

*Grow best varieties.* There are, of course, many other ways in which the nurseryman can be of great assistance to the orchardist. For instance, he should not grow or sell varieties he himself would not plant, for the orchardist is bound to plant the varieties nurserymen offer, therefore, it is the nurseryman's duty to see that his list is not loaded down with worthless varieties, and at the same time, see that it includes new varieties which have proven worthy of propagation. In short, the nurseryman should give more attention to the

varieties he grows and sells. We are glad to say, that, taken as a whole the lists of the better nurserymen are evidence of the fact that they are improving from year to year.

*Orchardists preserve valuable new fruits.* Right here is where the orchardist in his turn may be of assistance to the nurseryman and repay the obligation he has incurred by accepting his services and assistance. He should be on the lookout for new and valuable varieties, and should he discover one that seems to be of unusual merit, he should take steps to see that it is not lost to horticulture. Orchardists should follow the shining example of such men as S. A. Hiatt, who first sent the Delicious Apple to my father, Mr. C. M. Stark—who named and added it to his propagating lists and later distributed it throughout the length and breadth of our land; such men as Peter Gideon to whom we are indebted for the Wealthy Apple and Florence Crab; Dr. Stayman, originator of the Stayman Winesap, and hundreds of others.

Surely it is the bounden duty of every conscientious orchardist to see that no valuable variety perishes from the face of the earth and be forever lost to the horticultural world.

*Quality trees—quality prices.* Another point which some orchardists seem to overlook is the fact that they should not only plant first class varieties, but the most vigorous and finest trees of those varieties they can procure. A puny child more often than not makes a puny man—weak trees always make poor orchards, and poor orchards are not only unprofitable but when uncared for, they become harbors for pests and are a real danger and menace to the community. It is the orchardist's duty to plant the best trees he can buy and he should be willing to pay the nurseryman a fair price for good trees. The nurseryman must live and if the orchardist is not willing to pay a good price for a good tree, he can not expect the nurseryman to grow good trees for poor prices. Of course, very often, nurserymen are to blame because of overproduction, but no doubt in some instances the general unwillingness of the orchardist to pay a fair price for trees may cause some nurseryman to slight the tree at some stage in its growth and cut down expenses in order to make things come out even, or make a little profit. When the orchardist buys cheap trees, he has no right to grumble if they develop into a cheap inferior orchard.

*Cut prices.* We are glad to know there is a growing sentiment among orchardists to pay more attention to quality and less attention to price. We believe our own experience in the past year is an excellent proof of this statement. As you all know, the apple and peach tree trade was decidedly unsatisfactory; throughout the country, in most cases, there was much price cutting. In the face of low prices, our Company held our prices up. True, we lost some business, but we believe we got about as many orders as we would have

received at cut prices, and more money. In fact, we believe that holding up our price was largely instrumental in making the past season one of the most satisfactory we have had in years. In short, the nurseryman should grow a good tree—the orchardist should pay a fair price. We are bitterly opposed to slashing prices and believe that careful investigation on the part of nurserymen will reveal the fact that price cutting *does not increase the grand total* of the plantings throughout the country. In fact, we are inclined to believe that the orchardist, seeing a slump in fruit tree prices, is pretty liable to begin to get nervous and decide to “wait awhile,” and therefore, price cutting really restricts the market for trees, decreases the demand and hurts everybody.

*Co-operative selling.* In a large way the nurseryman should do more to co-operate with the orchardist in creating a market for fruit, popularizing consumption of apples and other fruit as staple foods, for as the demand for fruit increases, in the same proportion will the demand for trees increase and the nurseryman will greatly profit thereby.

#### AZALEAS AT THE ARNOLD ARBORETUM

For the decoration of northern gardens there are no more beautiful or desirable shrubs than the Azaleas of eastern North America. There are seven species of these plants and they are now all called Rhododendrons by botanists, and in the Arboretum all Azaleas are labeled Rhododendrons. The first species to bloom, *R. Vaseyi*, begins to flower the beginning of May and the flowers of the last, *R. viscosum*, can be found here as late as the middle of July, so that the Azalea season is a long one. *R. Vaseyi* is a tall shrub, with slender stems and an open irregular habit. In its home, in the sheltered valleys of the Blue Ridge in South Carolina, it sometimes grows to the height of from fifteen to eighteen feet. The flowers are produced before the leaves appear in small, compact clusters and are pure pink in color, but occasionally plants are found with nearly white flowers. Although this plant was not discovered until comparatively a few years ago, it has been much planted in gardens near Boston and it is fast becoming here one of the most popular of the early-flowering spring shrubs. With *R. Vaseyi* the Rhodora (*R. canadense*) flowers. This well known dwarf shrub often covers, especially in the north, large areas of moist or swampy land with a sheet of bloom. The small flowers, however, are of a rather unattractive rose-purple color, and the fame of the Rhodora is perhaps due more to Emerson's poem than to its intrinsic beauty. Naturally the Rhodora grows from Newfoundland to Pennsylvania and New Jersey.

The next to bloom are the two pink-flowered species, *R. canescens* and *R. nudiflorum*; the former is a northern and the latter a more southern plant and is especially common in the Gulf States from Florida to eastern Texas. The flowers of these plants open before or with the unfolding of the leaves and in early spring fill the woods with beauty and fragrance. Both species can now be seen in flower on Azalea Path, and there is a large mass of *Azalea canescens* on the right-hand side of the Meadow Road in front of the Linden Group.

The Flame-colored Azalea, *R. calendulaceum*, is the next species to flower and is already beginning to open its orange, yellow, or reddish flowers which are not fragrant. This shrub is an inhabitant of the Appalachian Mountain region from Southern New York to Georgia, and is extremely abundant on the lower slopes of the high mountains of North Carolina and Tennessee. In flower it is the most showy of our Azaleas and one of the most beautiful of all flowering shrubs. A large mass of this Azalea has been planted on the slope below the Azalea Path and occasional large specimens can be seen in the border plantations along some of the roads.

The next species to flower, *R. arborescens*, is also a native of the Appalachian Mountains on which it grows from Pennsylvania to Georgia and where in sheltered valleys it sometimes attains the height of fifteen feet or more. The flowers, which appear after the leaves are nearly fully grown, are white or faintly tinged with rose color and are made conspicuous by the long bright red filaments of the stamens. The flowers are very fragrant and the young leaves have the odor of new mown grass. Less showy in flower than the Flame-colored Azalea it is one of the most beautiful of all hardy Azaleas.

The last species to flower, the Clammy Azalea or Swamp Honeysuckle, is a common inhabitant of the swamps of the eastern states, especially of those in the neighborhood of the coast. The rather small flowers are pure white and covered with clammy hairs, and the leaves are often of a pale bluish color, especially on their lower surface. This plant is valuable for the lateness of its flowers which do not open until the flowers of most hardy shrubs have passed, and for their fragrance.

These shrubs are all perfectly hardy in eastern Massachusetts and flourish in all exposures and in good garden soil, although like all Rhododendrons they cannot be made to live in soil strongly impregnated with lime. They are not often cultivated because it is not easy to find these plants in nurseries, for few nurserymen, especially in the United States, care to take the trouble to raise such plants from seeds, the only satisfactory way in which they can be propagated. In beauty, constitution and hardiness they are superior to the so-called Ghent Azaleas which are hybrids between the species from the Caucasus, which is not hardy here, and some of the American species. The Ghent Azaleas are favorites with European nurserymen who propagate them by grafting and they are imported in large numbers into this country. Here they grow slowly; many of the varieties are not at all hardy and others are liable to lose large branches in severe winters. The American species are better garden plants here, too, than the yellow-flowered Asiatic species, *R. japonicum*, usually called *Azalea mollis* in gardens, a common Japanese and Korean plant, and the Chinese *R. sinense* or the hybrids of these two species. *Azalea mollis* is hardy and free-flowering but the plants are short-lived in this country. The little known *R. sinense* with its beautiful yellow flowers is hardy but the flower-buds have usually been killed in each of the two or three winters this plant has been exposed here in the open ground.



From the U.S.D. of A.

UNITED STATES DEPARTMENT OF AGRICULTURE  
FEDERAL HORTICULTURAL BOARD  
WASHINGTON, D. C.

June 3, 1913.

Dear Sir:

You are respectfully advised that the following list enumerates the five-leaved pines included in Notice of Quarantine No. 7, effective May 21, 1913. None of the species listed nor any horticultural varieties of the same may be imported.

*Pinus albicaulis*, *Pinus aristata*, *Pinus Ayacahuite*, *Pinus Balfouriana*, *Pinus Buonaparteana*, *Pinus Cembra*, *Pinus excelsa*, *Pinus flexilis*, *Pinus koraiensis*, *Pinus Lambertiana*, *Pinus Mandschurica*, *Pinus monticola*, *Pinus parviflora*, *Pinus pentaphylla*, *Pinus peuce*, *Pinus pygmaea*, *Pinus strobiformis*, *Pinus Strobilus*.

Yours very truly,

C. L. MARLATT,  
Chairman of Board.

#### NOTICE OF QUARANTINE NO. 7 WHITE PINE BLISTER RUST

WASHINGTON, D. C., May 21, 1913.

The fact has been determined by the Secretary of Agriculture that a tree disease known as White Pine Blister Rust (*Peridermium strobi* Kleb), new to and not heretofore widely prevalent or distributed within and throughout the United States, exists in Europe and Asia.

Now, therefore, I, David F. Houston, Secretary of Agriculture, under authority conferred by section 7 of the act approved August 20, 1912, known as "The Plant Quarantine Act," do hereby declare that it is necessary, in order to prevent the introduction into the United States of the White Pine Blister Rust, to forbid the importation into the United States from each and every country of Europe and Asia of all five-leaved pines.

Hereafter and until further notice, by virtue of said section 7 of the act of Congress approved August 20, 1912,

the importation for all purposes of all five-leaved pines from the countries named is prohibited.

This notice of quarantine amends and supersedes Notice of Quarantine No. 1 promulgated September 16, 1912, and shall be effective until otherwise ordered.

Done at Washington this 21st day of May, 1913.

Witness my hand and the seal of the United States  
Department of Agriculture.

D. F. HOUSTON,  
Secretary of Agriculture.

#### NOTICE OF MEETING

July 22-23—American Forestry Association. Soo-Nipi Park Lodge, Lake Sunapee, N. H. Directors, midsummer business meeting and forest investigation.

C. R. Burr, Manchester, Conn., called at the office of the NATIONAL NURSERYMAN on his western summer trip.

The Columbia River trip was greatly enjoyed by everyone. The mountainous river banks and water falls reminded one of our delegates of the shores of the Straights of Magellan.

The Pacific Coast Nurserymen have already hatched an egg in the shape of a boom for San Francisco for the convention of the American Association of Nurserymen for 1915.

June 10th, P. Owerkerk, Hoboken, N. J., sailed for Europe on the Steamship New Amsterdam.

W. P. Bates formerly of the Ohio nursery and Supply Co., Elyria, Ohio, was a caller at the NATIONAL NURSERYMAN's offices. Mr. Bates expects to establish a nursery in the vicinity of Cleveland.

I may say that I have been in touch with your valuable paper for a considerable time, both in Scotland and since coming to America nearly six years ago, and I find it the most valuable publication for practical nurserymen.

Kindly place us on your mailing list so that we may receive every issue of your paper; one year's subscription enclosed.

Rose Hill, N. Y.

Yours very truly,

F. W. BROW.

#### "THE MONTHLY SUMMARY OF COMMERCE AND FINANCE" FOR APRIL, 1913, GIVES THE FOLLOWING REPORT OF IMPORTS OF PLANTS, TREES, SHRUBS AND VINES.

ARTICLES	MARCH—				SEVEN MONTHS ENDING MARCH—					
	1912		1913		1911		1912		1913	
	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values
Plants, trees, shrubs and vines:										
Fruit plants, tropical and semi-tropical, for propagating purposes <sup>2</sup> ..... free..		323		35				22,607		3,407
Bulbs, bulbous roots, or corms, cultivated for their flowers or foliage ..... M...dut...	544	4,862	1,015	8,631		1,587,777	216,013	1,713,633	288,688	1,822,424
All other.....dut...		195,977		183,542		992,667		1,124,361		1,254,682
Total.....		201,162		192,208		2,580,444		2,860,601		3,080,513



### PEAR BLIGHT TREATMENT

New infections start in and from the blossoms. The bacteria causing this disease are carried by bees or other insects from hold-over cankers in the trunk or larger branches. Blossoms thought to be infected should be removed at the first indication of the disease. This is done by breaking off the blossom spurs, which should be collected as fast as picked and burned. Branches and young growth should be watched for new infections and the branch or tip should be removed as soon as the disease appears, cutting well below the affected portion. Disinfect all wounds with a corrosive sublimate solution, one part to 1,000. Watch the trunks and large branches for cankers. These should be treated as soon as found by cutting out the affected bark beyond all trace of the disease and then disinfecting the wound with the corrosive solution. Keep all sprouts removed from the base and trunk of the trees.

### TREES INFECTED WITH CROWN GALL NOT PERMITTED TO BE PLANTED IN NEW YORK STATE

Mr. Calvin J. Huson, Commissioner, Albany, New York, addressed the following letter to a nurseryman offering infected trees for sale:

Dear Sir:

I have received a copy of your circular letter in which you state as follows:

"I have at Geneva, New York, the following list of apple trees, graded out of a block of 200,000 trees, and set aside by themselves, because they are slightly affected with crown gall of a mild form.

These trees are of good conformation with splendid top growth. I will offer these trees in trench f.o.b. cars in bulk at Geneva, New York," etc.

I write now to call your attention to the fact that trees infected with crown gall will not be permitted to be planted in the State of New York. Crown gall is believed to be an infectious disease deleterious to the trees and the fact that they are slightly affected or that planters may be willing to use them shall not be considered an excuse for planters to use such trees. I am confirmed in this action, furthermore, because of the fact that the nurserymen of this state do not regard such trees affected by crown gall as merchantable.

Very truly yours,  
COMMISSIONER.

### NURSERY STOCK INSPECTION

Commissioner Huson of the State Department of Agriculture, states that since January 1, 1913, he has received notice of, and his agents have inspected, approximately 10,000 separate shipments of nursery stock coming into the State, embracing millions of plants, trees and seedlings. The amount of diseased and infected stock found is much less than in former years. Two shipments only contained gipsy and brown-tail moths, the gipsy moth coming from Japan.

As the shipment inspection ends, the annual inspection for diseases of white pine will begin, followed by the summer inspection of nurseries.

Upwards of 200 official samples of insecticides and fungicides sold on the markets of the State have been gathered and sent to the New York Agricultural Experiment Station for analysis.

It may interest the many friends among the nurserymen to know, that Mr. Winfried Rölker started on his annual European business trip on May 17th by S. S. Zeeland, visiting Belgium first; and thence looking over the important nursery centres of Europe. He expects to return by the end of July.

### PROPOSED TARIFF ON APPLE SEED

The present tariff on apple seed is 10 cents per pound or \$4.00 per bushel. In the Tariff bill now before Congress the rate is fixed at 15 per cent ad valorem. On this basis it will make the duty approximately from \$1.50 to \$2.00 per bushel, depending upon the price at which it may be sold in Europe.

No doubt this reduction in the cost of the French seed will tend to increase the plant in this country next year, which will be an unfortunate condition. A heavy plant was made a year ago resulting in a large surplus of apple seedlings this winter, and as usual under such circumstances, the prices towards the close of the season were cut below cost of production.

Enclosed find check for NATIONAL NURSERYMAN. Would say that I would not want to be without NATIONAL NURSERYMAN as it gives valuable information to nurserymen.

Yours truly,  
THE ADAMS COUNTY NURSERY,  
H. G. Baugher, Proprietor.

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Tea's Mulberry, 2 year heads.

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Please submit list of wants for prices.

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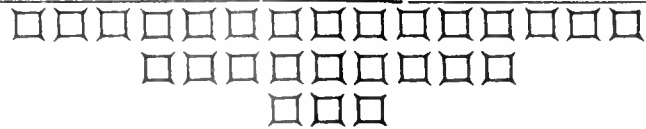
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INCORPORATED 1902

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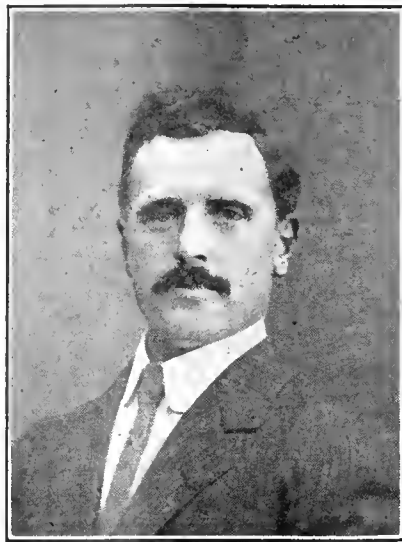


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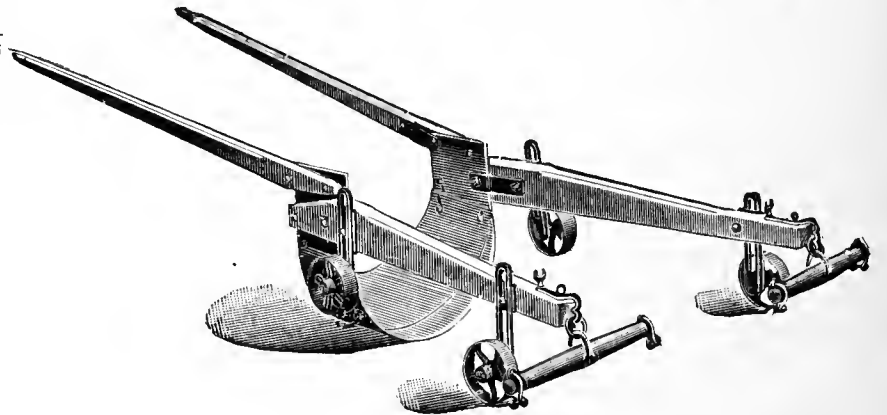
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And a general line of **ORNAMENTAL TREES** and **SHRUBS**. All stock clean and thrifty, the best that can be grown.

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We hold one of the finest stocks in England of **2 yr. field grown Hybrid Tea Roses on the seedling briar**, also a large collection of **Standard Roses on briar stock**.

**Hardy American Rhododendrons** of the best varieties, such as the *Sargents*, *Chas. Dickens*, *E. S. Rand*, *Sefton*, *Old Port*, *Everettianum*, *Etc.*, *Etc.* We grow 60 acres of Named Rhododendrons.

250,000 Manetti Stocks first grade, grown on sandy ground and guaranteed well rooted at bottom of stock.  
25,000 Pinus cembra, from 6 in. to 3 ft.  
25,000 Andromeda florabunda, in all sizes up to 2 ft.  
5,000 Abies parryana Kosteriana from 1 ft. to 4 ft.

Windlesham  
Nurseries

**W. FROMOW & SONS**

SURREY,  
ENGLAND

ESTABLISHED 1866

### W. T. HOOD & CO.

OLD DOMINION NURSERIES

**RICHMOND, VA.**

Growers of a general line of

**HIGH GRADE NURSERY STOCK**

OFFER FOR FALL, 1912, Peach, Pear, Cherry, Plum.  
California Privet, 1 and 2-year, extra fine. : : :

SEND US YOUR LIST FOR QUOTATIONS

**WE OFFER** for prompt shipment several thousand bushels of 1912 Crop N. C. Natural Peach Seed. Can give you Screened or Country Run Stock. The 1913 Crop is a failure and practically none will be gathered. Write for prices. Booking orders for July and August shipment.

### Hickory Seed Co.

Hickory  
N. C.

### The Josselyn Nursery Co.

FREDONIA, N. Y.

(Successors to George S. Josselyn)

GRAPE VINES OFFER GOOSEBERRIES  
CURRANTS

in all leading varieties. Stock has made the strongest and most vigorous growth in years.

WRITE FOR PRICES

### Charles Detriche, Senior

ANGERS, FRANCE

Grower and Exporter of Fruit-Tree Stocks, Forest Tree Seedlings, Rose Stocks, Shrubs, Vines, and Conifers for Nursery Planting.

For all information as to Stocks, prices, terms, etc., address

### JACKSON & PERKINS CO.

(SOLE AGENTS)

NEWARK, N. Y.

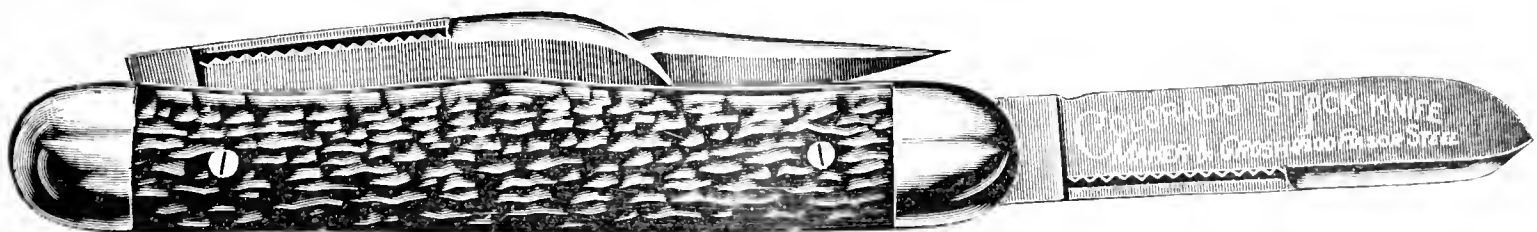


EVERY SATURDAY

Advertising Space, \$1 Per Inch Subscription, \$1 Per Annum  
Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the Nursery, Florist, Seed Trade and Allied Industries. With a paid up subscription and distribution list of 9000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN of Philadelphia.

For sample copy, discounts, etc., address

THE FLORISTS' EXCHANGE, P. O. Box 1697, New York City



**The Celebrated COLORADO STOCK KNIFE No. TB. Price \$1.10 Postpaid. 6 for \$5.50**

For 35 years this knife has been our big seller. It is used as a stock knife, the open blade being fine for spraying animals; it is equally fine in a nursery, for the open blade is a budding blade, and the short, closed blade is an excellent grafting blade. The Maher & Grosh Knives are used in almost every nursery in the United States. They are hand-forged from razor-steel and warranted. All-steel Pruning Shears \$1.00. Nursery Pruner 50c. Pocket Pruner 60c. Pocket Budder 35c. Pruning Saw \$1.00. Nursery and Florists Propagating Knife, white handle, 50c. All Postpaid. Send for our 12-Page Nursery Catalogue. We solicit direct trade.

90 A St.

**MAHER & GROSH CO.**

Toledo, Ohio

When writing to Advertisers, please mention The National Nurseryman

We are now ready  
to quote prices on  
a fine assortment  
of Select Nursery  
Stock for Delivery  
Fall 1913 and  
Spring 1914 :: ::



Established 1870

**Apple**---One and two year  
**Cherry**---Iowa, New York and Indiana Grown  
**Peach**---One year. Good selection  
**Pear**---Standard and Dwarf. Budded on French  
pear and quince roots  
**Plum**---Native, European and Japanese  
**Currants**---All Leading Varieties  
**Grapes**---New York Vines  
**Gooseberries**---Acres of Downing, Houghton,  
Champion and Red Jacket

### Small Fruits, Shade Trees and Ornamentals

**Forest Tree Seedlings**---A Large Supply  
**Imported Fruit Tree Stocks**---A Full Line  
All Grades

**Apple Seedlings**---One of our Leading  
Specialties

Let us have your list of wants. Will save you money.

## The Shenandoah Nurseries Shenandoah, Iowa

D. S. LAKE, Proprietor

## RAFFIA! RAFFIA!

BALE LOTS OR LESS



**B**UDDING TIME will soon be here. You will want  
Raffia—Good Raffia—the poor kind can be bought  
easier and for less money. But there's no good  
reason why you should buy promiscuous brands of uncer-  
tain quality when you can buy the **Red Star Brand**—  
the nurserymen's grade at our present prices. We also have  
a limited quantity of **XX Superior**, an extra fine East  
Coast quality at a little higher price, and for those who  
consider price rather than quality we offer **Arrow Brand**  
an ordinary grade of Raffia at lower price.

**Colored Raffia**, is now being used by many nursery-  
men to designate the caliper of trees—try some, you'll  
find it very useful for many purposes.

Write us for prices, stating brand you prefer. Samples  
free on request when you state brand and approximate  
quantity required.

Orders filled same day as received

**McHUTCHISON & CO.**

THE IMPORT HOUSE

17 Murray St., NEW YORK

TOP NOTCH

## Barberry Thunbergii Seedlings

THE GREAT MONEY MAKER

Place your order early, sure to get  
the right stock. You want  
**CALIFORNIA PRIVET** too. We  
have over a million in all grades.  
**PEACH TREES** by the car load.  
Please let us quote prices.

**C. R. BURR & COMPANY**  
MANCHESTER, CONN.



# ORNAMENTAL STOCKS

**NURSERIES**  
**420 ACRES**

## WE GROW

FRUIT TREE STOCKS—All Sizes.  
300 varieties of Conifers, 1 to 4 years old.  
1200 varieties of Ornamental Trees and Shrubs, 1 to 3 years old.  
1600 varieties of New and Old Ornamental Trees & Shrubs in all Sizes.  
250 varieties of Climbing Plants.  
400 varieties of Conifers, 1 to 4 feet high.  
400 varieties of Perennials.  
800 varieties of New and Old Roses.

**We Have No Agents.**  
**Write direct to us and**  
**ask for WHOLESALE**  
**CATALOGUES**

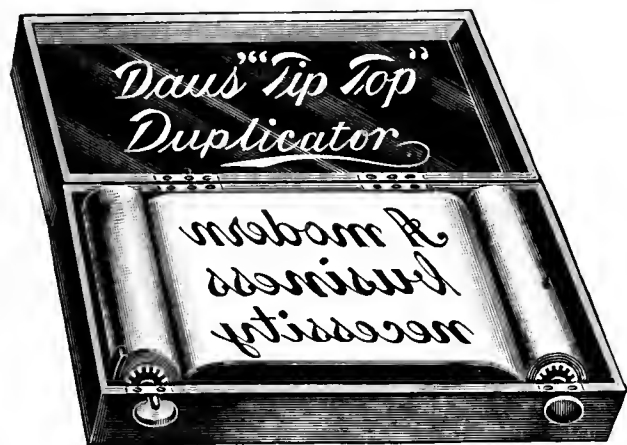
TRANSON BROS. & D. DAUVESSE'S NURSERIES,

16 Route d'Olivet

**BARBIER and CO., Successors,**

Orleans, France

## Have You Got One?



We mean a  
**DAUS TIP-TOP DUPLICATOR**

with  
**"Dausco" Oiled Parchment Back**

negative roll, that ideal assistant, always ready when you want to quickly make 100 Copies from Pen Written and 50 Copies from Typewritten Original. Complete Duplicator costs \$5, but we don't want your money until you are satisfied that it is all right, so if you are interested just write to send it on 10 Days' Trial Without Deposit.

**FELIX A. G. DAUS DUPLICATOR CO.**

**Daus Bldg., 111 John St., New York City**

## FOREST TREES FRUIT STOCKS



SHIPMENTS OF OVER 200  
MILLION OF TREES  
ANNUALLY

**LARGEST**  
**FOREST TREE**  
**NURSERIES**  
**IN EUROPE**

Please write for Catalogue and  
Forest Planter's Guide to our  
American Representative:

**OTTO HEINECKEN**

Whitehall Bldg., 17 Battery Place

NEW YORK

**J. HEINS' SONS**

**HALSTENBEK No. 152**

**Near HAMBURG, GERMANY**

## Tree Protection

SCALINE will protect them all seasons of the year.

SCALINE is an oil and sulphur composition, a scalicide, insecticide and fungicide combined—three in one—and it will destroy San Jose, oyster shell, cottony maple, tulip scale, aphids, red spider, thrips, mealy bug and all sap sucking insects.

SCALINE is composed of a high grade petroleum oil and the properties of our fungicide Fungine, thus making it equally effective for the control of various fungi.

SCALINE is used at the strength of one part to twenty parts water for scale; one part to fifty parts for other sap sucking insects. It is readily soluble in water, requires no mixing, and containing no sediment can be applied through the finest spray nozzle.

SCALINE may be used as safely in the growing as in the dormant season. It is an all year round spraying material.

Gallon, \$1.50

Fifty gallons, \$37.50

Ten gallons, \$10

We believe that in SCALINE we have one of the best spraying materials on the market today for general spraying of trees, shrubs and hardy plants. We feel confident that a trial would make you a regular user of this product.

## Aphine Manufacturing Co.

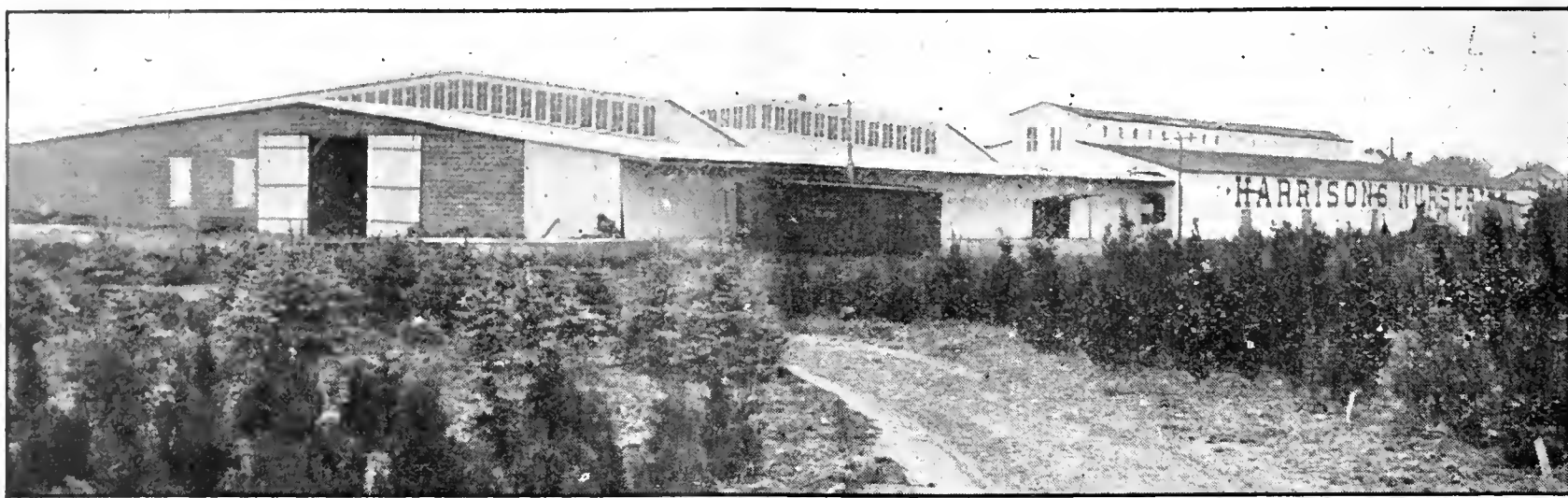
M. C. EBEL, General Manager  
Manufacturers of Agricultural Chemicals  
MADISON, N. J.

"APHINE"  
Insecticide

"FUNGINE"  
Fungicide

"VERMINE"  
Vermicide

When writing to Advertisers please mention The National Nurseryman



## A Little Journey to Harrison's Nurseries Will Make a Pleasant Vacation For You

Come to the beautiful "Eastern Shore" of Maryland, see this great farming section, and some of its historical places—it is an old section, you know, and the famous Decatur plantation (where Commodore Stephen Decatur was born) is a part of our nurseries.

The nurseries contain about three thousand acres. Some of our visitors have said that the nurseries are not at Berlin, but that "Berlin is at the Nurseries." We are located about seven miles from the Atlantic Ocean, and about fifty feet above tide level. The temperature in this part of Maryland never gets very low in winter, and the summers are a great deal cooler than at inland points. The average temperature for the year is between 53 degrees and 54 degrees. We never have extreme droughts here and the ocean breezes are always moist.

We grow a hundred and sixteen varieties of peaches, ninety varieties of apples, all the best kinds of pears, cherries and plums. Strawberry plants are a big item, too. Last year we grew forty-five varieties, and handled millions of plants.

When we say we grow millions of peach trees it doesn't mean very much unless you have some standard by which to compare the figures—but if you could stand in our nurseries and look over a block of these trees, the figures would begin to make an impression. You can look in one direction for almost a mile and see nothing but the tops of little peach trees.

Turning in another direction you get a broad view of the blocks of apple trees; long, straight rows of sturdy youngsters. And the rows are clean—every one cultivated as carefully as a farmer cultivates his prize-winning corn patch.

If you look another way you will see row on row of Privet—literally Privet by the mile. Now you begin to realize the size of the nursery that had its beginning in the little peach orchard in Delaware, and has grown until it now covers over four square miles—four sections, our western friends call them.

The buds that we use come from bearing trees; we have about four hundred thousand trees in bearing, so we don't have any trouble in getting good buds and all we need. This part of the work is looked after by George A. Harrison, and beginning about June 15th he has a force of a hundred men at work. One of his champion "budders" covered 4700 peach trees in ten hours one day last summer.

Last summer we built a new packing house—the old houses weren't big enough to take care of things as fast as they were dug. The main house is about 400 feet long and 150 feet wide. "Mud-holes" are made in the cement floor and the roots of every tree are dipped before packing. A railroad switch runs along the house, and the car and house floor are on a level, so it isn't hard work to shoot the boxes into the car.

There are many other things of interest around the nursery—the sawmill where the boxes are made; the moss swamps, where we get all the packing moss; the fumigating plant; the cold storage house for keeping buds, a process originated by George Hale Harrison.

All these things mean something to you, because you want your stuff shipped in the best way, and put through as quick as possible. You want stock that will please your customers and bring "repeat" orders—you get it from Harrison's Nurseries.

The summer meeting of the Maryland-Delaware Horticultural Societies will be held at Berlin, July 31, and the members will be our guests while here. This summer meeting offers practical demonstrations of the value of modern methods in fruit growing, as the School of Horticulture of the Maryland Agricultural College is conducting a series of experiments in spraying and fertilizing in our bearing orchards. A visit at this time will give you a great deal of valuable information.

Berlin is on the Pennsylvania Railroad, which runs north and south, and on the Baltimore, Chesapeake and Atlantic, which runs east and west. You can come one route and go another, in this way visiting a larger part of the country. Philadelphia, Baltimore and Washington are our nearest large cities.

We would like to have you come to Berlin, see the nurseries, the bearing orchards, the big farms around here, and go to Ocean City for a dip in salt water. Come at any time—we are always at home and ready to receive visitors. Let us know when you can come and we will meet you at the station and make every effort to have you enjoy your visit here. We will pay your hotel expenses while here.

Write or wire for our new Surplus List of Fruit and Ornamental Trees, Shrubs, etc. You should plan now for your fall business.

**Harrison's Nurseries**  
J.G. HARRISON & SONS PROPRIETORS  
BERLIN MARYLAND

Designed and written by The McFarland Publicity Service, Harrisburg, Pa.  
W. F. HUMPHREY, PRINTER, GENEVA, N. Y.



# THE NATIONAL NURSERYMAN



AUGUST, 1913

U. S. Department of Agriculture  
1913

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

## THE MONROE NURSERY

Established 1847.

OFFER A GENERAL LINE OF

### Choice Nursery Stock

## CHERRY and STD. PEAR

of Extra Fine Quality.

If you are in the market for superior trees write  
us for prices.

**I. E. Ilgenfritz' Sons Co.**  
MONROE, MICH.

## EVERGREENS

### OUR LEADING SPECIALTY

RHODODENDRONS, HEMLOCKS, WHITE  
PINES, BOX BUSH. A general collection  
of specimen ornamentals.

ALSO

NORWAY MAPLES, PIN OAKS, IBOTA  
PRIVET, SPIRAEA VAN HOUTTEI  
by the thousand.

## Andorra Nurseries,

WM. WARNER HARPER, Prop.

CHESTNUT HILL, PHILA., PA.

## MOUNT ARBOR NURSERIES

E. S. WELCH, Proprietor

136 Center St., Shenandoah, Iowa

Make a Specialty of a Complete Line of High Quality Nursery  
Stock for **WHOLESALE TRADE**

Large Stock of Apple and Crab, Peach, Plum, Cherry, Currants,  
Gooseberries, Blackberries, Root Cutting Plants.

**ORNAMENTALS**—Elm, American White; Maple, Silver  
Leaved; Privet, California and Ibota.

**ROSES**—Hybrid Perpetuals, Moss and Ramblers.

**FOREST TREE SEEDLINGS**

**APPLE SEEDLINGS**

**APPLE GRAFTS**, made to order

Always pleased to quote your wants  
**CORRESPONDENCE AND INSPECTION INVITED**

## THE JEWELL NURSERY CO.

*Wholesale Nurserymen*

LAKE CITY, MINNESOTA

Established 1868

1500 Acres

Everything in the line of Nursery Stock  
suited to Northern culture.

*Let us figure with you*



Now is the time to place your orders for  
**Direct Importations**

from European Nursery Centers

**FRENCH FRUIT STOCKS**

Apple, Pear, Myrobolan, Mahaleb, Mazzard Seedlings, Manetti, Multiflora and Quince stocks. Also full line of Ornamentals for lining out, from Vincent Lebreton's Nurseries, Angers. Best packing and grading. December or February shipment from France.

**Boskoop, Holland, Nursery Stock**

Boxwood (pyramids, bushes, standards, ball-shape, etc.). Roses, Tree Roses, Rhododendrons, Azaleas, Magnolias, Koster Blue Spruce, Evergreens, Hydrangea P. G., etc., etc., from Schaum & Van Tol, Boskoop.

**DECIDUOUS TREES**

Norway and Schwedler Maples, Tiliac, Elms, Chestnuts, Oaks, Planes, Thorns, etc., etc., etc., straight stems and good roots, careful selection, best packing from Union Nurseries, Oudenbosch, Holland.

Besides representing the above firms as Sole American Agents, we import to order

**FROM JAPAN AND ENGLAND**

English Manetti, Gooseberries 2 and 3-yr. (Whinham Industry, Whitesmith, etc.), Japanese Nursery Stock and Lilies.

**BAY TREES.** Standards, Pyramids and all shapes from Belgium, Fall or Spring shipment.

**RAFFIA.** Red Star Brand and four other grades; also dyed Raffia in 20 colors. **WRITE US** for catalogs, special lists, etc., stating the class of stock you are interested in.

**SHIPPING.** We have our own Custom House Dept., with shipping connections at Havre, Hamburg, Rotterdam, Antwerp, Southampton, etc.

**McHutchison & Co.**

17 Murray St.  
 New York

The Import  
 House

**SIMPSON**

is the name of the men who grow the finest

**CHERRY**

that can be produced by suitable soil, climate and expert knowledge.

Take a look at the stock or ask for a sample and be convinced of the extra quality of their

**TREES**

PEACH

ST. PEAR

APPLE—1 year, 2 year and 3 year  
 AMERICANA PLUM ON PLUM  
 COMPASS CHERRY ON PLUM

**H.M. Simpson & Sons**

VINCENNES, INDIANA

**Griffing Brothers**

**Grow the Better Kind of Trees**

**PECANS,** Budded or Grafted

**PLUMS** on Plum Roots

**PERSIMMONS,** Japanese

**FIGS,** Celestial, Magnolia, Brown Turkey varieties

**SCUPPERNONG, JAMES** and other Muscadine Grapes

**MULBERRIES,** well branched trees, free from Blight

**CAMPHOR** Trees

**CONIFERS** and Evergreen Trees

**PALMS** and Tropical Plants

**SATSUMA** Orange and other Citrus Fruits

Prices are Right

Trees are Right

**Griffing Brothers**

JACKSONVILLE, FLORIDA  
 MIAMI, FLORIDA

MOBILE, ALABAMA  
 PORT ARTHUR, TEXAS

# NURSERYMEN AND FLORISTS

looking for stock can find largest assortment in the United States at the

## Painesville Nurseries

Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses,  
Vines and Plants, Grapes, Gooseberries, Small Fruits, Bulbs, Seeds,  
Palms and other tender Greenhouse Plants

Have large stock stored in frost-proof cellars that can be shipped at any time desired; switch from N. Y. C. lines direct into our packing house; can load without exposure. Unsurpassed facilities for handling orders large or small.

CATALOGS AND PRICE LISTS FREE



AMERICAN ELM

### A FEW SPECIALS WHILE THEY LAST :

STANDARD PEARS in assortment, DUCHESSE DWARF PEARS, BOURGEAT QUINCE,  
PRUNUS PISSARDI and TRILOBA, CUTHBERT and other Raspberries,  
CONCORD and other GRAPES

### OUR SPECIALTIES ARE

Roses, H. P. Moss, Ramblers, Climbers, etc., Peaches, Pears, Plums, Cherries,  
Ornamental Trees and Shrubs in car lots, Weeping Mulberries, Elm and Ash,  
Clematis, Ampelopsis, Paeonies, Hydrangeas, Bush and Tree Perennial Plants.

No Trouble to Price your List of Wants. 59 Years 1200 Acres 44 Greenhouses

**THE STORRS & HARRISON CO.**  
PAINESVILLE, OHIO

TOP NOTCH

# Barberry Thunbergii Seedlings

THE GREAT MONEY MAKER

Place your order early, sure to get the right stock. You want CALIFORNIA PRIVET too. We have over a million in all grades. PEACH TREES by the car load. Please let us quote prices.

**C. R. BURR & COMPANY**  
MANCHESTER, CONN.

## SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY  
PEACH PLUM

A Fine Block of  
Own Root Roses

ORNAMENTAL TREES SHRUBS  
BERRIES CLEMATIS  
EVERGREENS PEONIES PHLOX  
PYRAMIDAL and STANDARD  
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists  
and carload lots.

**W. & T. SMITH COMPANY**  
GENEVA, N. Y.

63 Years

700 Acres

## We Are Now Ready

to quote prices on a fine assortment of  
Select Nursery stock for Delivery Fall  
1913 and Spring 1914

**Apple**—One and two year.

**Cherry**—Iowa, New York, and Indiana grown.

**Peach**—One year. Good selection.

**Pear**—Standard, and Dwarf. Budded on French  
pear and quince roots.

**Plum**—Native, European, and Japanese.

**Currants**—All leading varieties.

**Grapes**—New York vines.

**Gooseberries**—Acres of Downing, Houghton,  
Champion, and Red Jacket.

**SMALL FRUITS, SHADE TREES, and  
ORNAMENTALS**

**Forest Tree Seedlings**—A large supply.

**Imported Fruit Tree Stocks**—A full line. All  
grades.

**Apple Seedlings**—One of our leading specialties.

Let us have your list of wants.  
Will save you money.

**The Shenandoah Nurseries**  
SHENANDOAH, IOWA  
Established 1870 D. S. Lake, Proprietor

## Berckmans' Specimens

We never call a tree or plant a "specimen" until it really has earned the title. Our evergreens are transplanted, sheared and root-pruned, each one getting just the proper attention to make it a really handsome and serviceable specimen. It costs more to produce such, but it's *worth* it—to us, to you and to your customers.

**Your Trade Will  
Be Pleased With Them**

We offer a select but limited stock at wholesale this year. We call attention to our *Biotas*—Aurea Nana, Aurea Conspicua, and Japonica Filiformis (see illustration); Retinospora, Thuya, and Juniper—all in popular sizes for the trade.

Our Deciduous Shrubs include Exochorda, Lilac, Spirea, Althaea, Deutzia, Philadelphus, and a very choice stock of Teas' Weeping Mulberry.

Broad-leaved Evergreens—Azalea Indica (Home-grown Plants) Manolia Fuscata, Aucuba, Ligustrum, and English Laurel. Among our fruits, we direct particular attention to our clean, thrifty Peach Trees, of which we offer the the leading sorts.

**WRITE FOR  
PARTICULARS NOW**

Tell us what you need, quantity, etc., and we will quote lowest price possible. Write early and get the best selections from our stock.

**P. J. Berckmans Co**  
INCORPORATED  
**Fruitland Nurseries**  
AUGUSTA, GEORGIA  
Established 1856. Over 450 acres in  
Nursery.

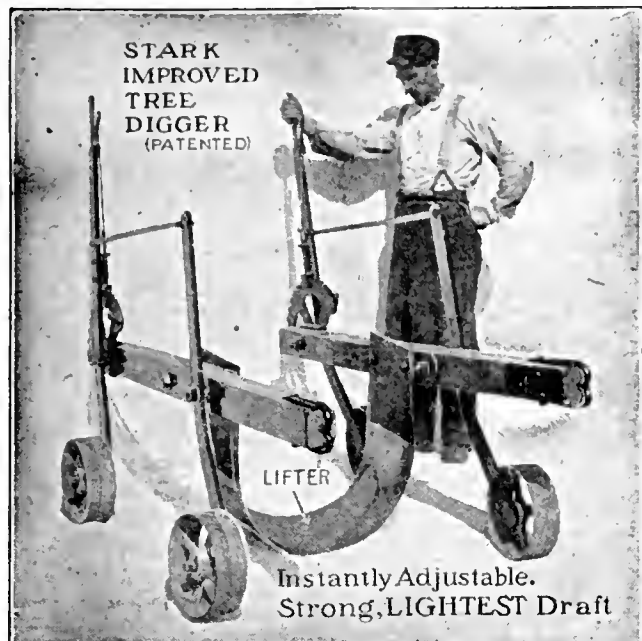
CONIFERS  
BROAD-LEAVED  
EVERGREENS  
DECIDUOUS  
SHRUBS  
WEEPING  
MULBERRY  
PEACHES  
OTHER FRUITS



Biota Japonica Filiformis.



## The Best Tree Digger on Earth



Used and Recommended by Leading Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

**Stark Bros. Nursery & Orchards Co.**  
LOUISIANA, MO.

## Hill's Evergreens

Orders for Evergreens for August and September planting should be placed at once; we are now booking orders and will be glad to answer your questions. We specialize on Evergreen Seedlings and Transplants for Nurserymen's and Dealers' Use, Lining Out, etc., and grow millions each year from the seed—all leading varieties.

Visitors to the A. A. N. Convention at Boston who can stop at Dundee will be made welcome and will find our display well worth coming to see.

If you cannot come, do the next best—write for our Wholesale Catalog, free to you.

**The D. HILL NURSERY CO., Inc.**

*Evergreen Specialists*

D. HILL, President Box 401, DUNDEE, ILLINOIS

**L. Spaeth** **BERLIN**  
Baumschulenweg  
GERMANY

**Largest Nurseries  
in Europe**

2000 ACRES

FOUNDED 1720

**HARDY TREES  
AND SHRUBS**

1. Our nurseries lie in a colder climate than the French, Dutch and English nurseries—
2. We grow all the stock we sell—
3. Moderate prices.  
Catalogs free—
4. When in Europe come and see our nurseries—

Have you seen and examined the quality and finish of our

**Rawhide Brand of Shipping  
Tags and Tree Labels**  
printed or plain, strung or wired?



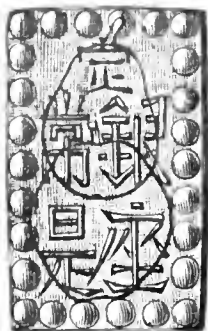
This stock is especially adapted to the most severe usage, being thoroughly waterproof & weather-proof. "Once used, always used."

Send for samples and prices. Our reference are the largest nursery men in the United States.

**The Denney Tag Co.**

WEST CHESTER, PENNSYLVANIA

# Heikes --- Huntsville --- Trees



Huntsville  
Wholesale Nurseries  
Huntsville, Ala.  
JESSIE S. MOSS, Prop.

We offer for Fall of 1913  
in large quantities as usual:

## SPECIALTIES

**APPLES**—Commercial varieties, one and two year, in large supply. As fine in quality as ever grown.  
**PEARS**—Kieffers, one and two years old. A much smaller crop than heretofore.  
**CHERRIES**—On Mazzard. Two year, Bing, Lambert, Napoleon, Black Tartarian.  
**CHERRIES**—On Mahaleb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.  
**PEACHES**—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.  
**ROSES**—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.  
**PRIVET**—Amoor River (South). Retains its foliage longer and holds its color better than California Privet.  
**PECAN SEEDLINGS**—Huntsville grown from selected nuts collected along the Gulf Coast. Thin shell.

See Price List for Particulars.

Address, HUNTSVILLE WHOLESALE NURSERIES  
HUNTSVILLE, ALA.

# Budding Time!

**RAFFIA.** How are you fixed? We can sell you from one to fifty bales and ship same day. We call it the "J&P Preferred" brand—clean, white, wide, long strands,—just what you want for budding; there's too much waste in short Raffia.

**BUDDING KNIVES.** Plenty on hand? Always a good plan to have a few extra ones—the boys will lose 'em, you know.

**FERTILIZER SOWER.** We sell a good one—pays for itself over again every summer—saves material, time and labor. Send for Price List of useful tools and things needed around the nursery.

Jackson & Perkins Co.  
NEWARK, NEW YORK

JUNE 1913

## BOBBINK & ATKINS

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ORIENTAL PLANES, NORWAY MAPLES, AMERICAN ELMS, SILVER MAPLES, HORSE CHESTNUTS, ETC.

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The kind that give satisfaction.

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Collected Stock—Cottonwood, Buffalo Berry, Juneberry and American Wahoo

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J. E. STONER, Prop.

We are pleased to offer for Fall 1913

Peach Trees, 1 year, 35 varieties

Apple, 1 year mostly buds

Pear, 1 and 2 year, all grades

Apple, 2 year, all grades

Cherries, 2 year, general list sour

Asparagus, 2 year

Can furnish the above in carload lots or less, also

Grapes, Currants, Gooseberries, Catalpa Speciosa, Carolina Poplar  
Ornamentals in good assortment

**WE WOULD MAKE VERY ATTRACTIVE PRICES ON PEACH  
TREES IN CARLOAD LOTS.**

*Please submit list of wants for prices. We have a few N. C. Natural  
Peach Seeds to offer. Crop 1912, also Crop 1913.*

When writing to Advertisers please mention The National Nurseryman

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For FALL 1913

Grape Vines, Currants and Gooseberries  
in all varieties and Grades

—also—

Grape and Currant Cuttings and Light  
Grade of Vines for Lining Out  
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## Vincennes Nurseries

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W. C. REED, Prop.

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PEACH—One Year. 30 varieties.

APPLE—Two Year. All grades.

APPLE—One Year. Cut Backs very strong.

SILVER MAPLE. All grades.

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Plum, Quince, Compass Cherry, Currants, Gooseberry, Catalpa  
Speciosa and ornamentals in good assortment.

Please submit list of wants for prices. Personal inspection  
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We are now ready to quote lowest prices on  
**FRUIT, SHADE AND ORNAMENTAL  
TREES, SHRUBS, EVERGREENS,  
VINES and HERBACEOUS  
PLANTS**

FOREST TREE SEEDLINGS we only have in limited supply  
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TREE SEEDS we can supply in limited quantities.

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## Grape Vines

and other small fruit plants for the Nursery  
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Give us a trial order, send in your list now for quotations

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# A Field of Seedlings

IF OUR APPLE SEEDLINGS were all in one row this year, the row would be 700 miles long. We have smoothed, raked, wheel-hoed, cultivated, weeded or sprayed each foot of this land twelve



times so far this season, which makes 8400 miles of walking and working and this constant walking and working will be kept up until the frost takes the leaves off the seedlings in the fall, and we commence digging.

**F. W. WATSON & CO.**  
*Apple and Pear Seedling Specialists,*  
**Topeka, Kansas**



# The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

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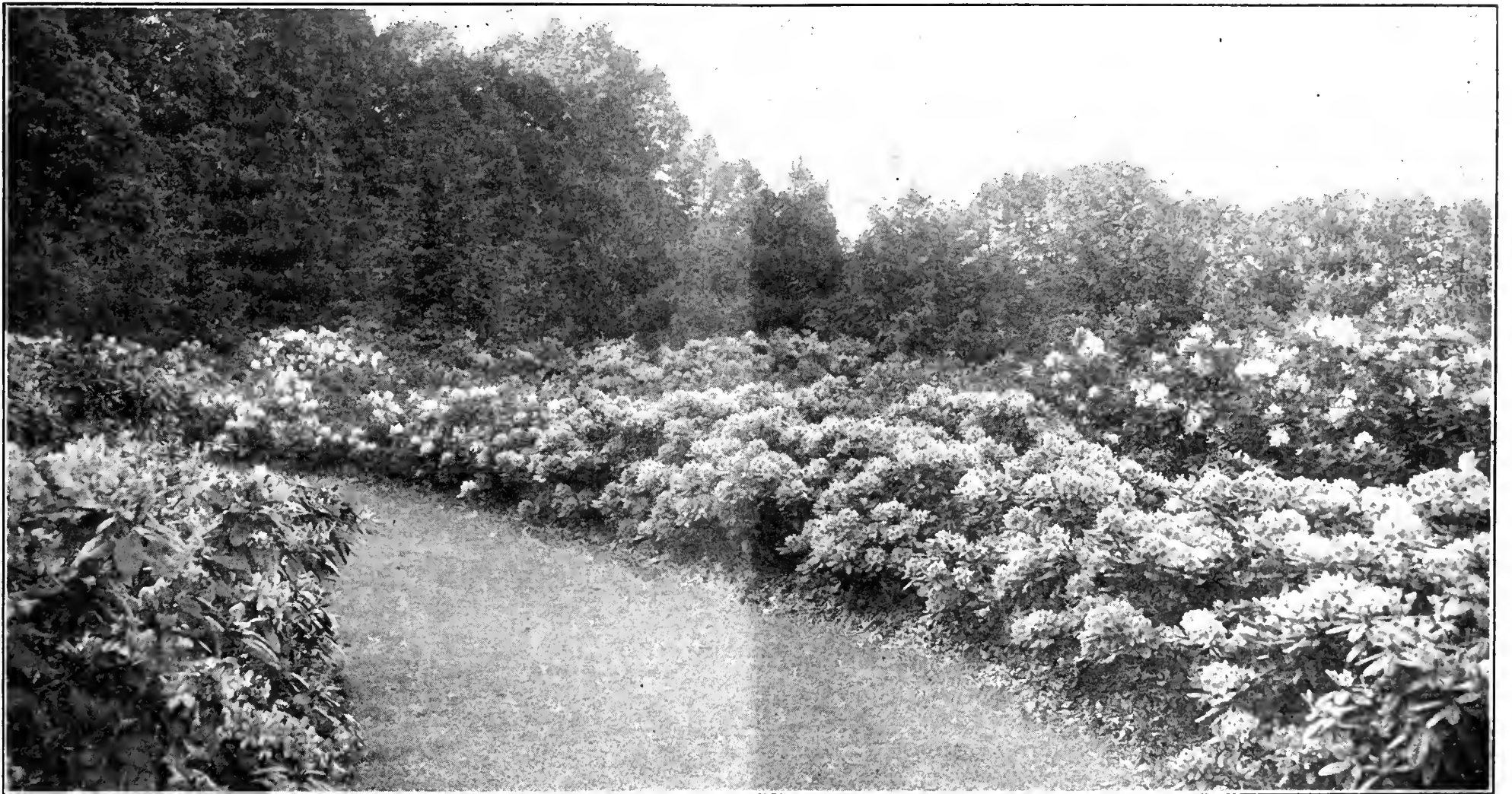
No. 8

## GROWING RHODODENDRONS

Rhododendrons are undoubtedly among the finest of ornamental plants. It is a great pity that nurserymen in the United States do not make an attempt to grow them rather than depending almost entirely upon imported stock. While they are plants that are not suited to every position

of them. There is undoubtedly a very good market for them which will never be overstocked.

Many of the varieties that are imported are not hardy and are grown mainly for florists for decorative plants rather than planting out of doors.



Rhododendrons Growing on The Wanamaker Estate, at Jenkintown, Pa.

and location, if conditions are suitable they undoubtedly do well in this country.

The subject of our illustration is a photograph taken on a private estate in the vicinity of Philadelphia and one could not wish for a more attractive looking lot of plants.

The surroundings as shown in the photograph are ideal for them, the Spruce and Hemlock accompanying them showing the proper plant associations.

Practically all the hybrids are imported from Europe, mainly from Holland and England, but it is high time some nursery made an attempt to grow them in this country. We believe the old Parson's Nursery at Flushing, Long Island, made great strides along this line but since then there does not seem to be any nursery that has taken hold

If properly grown in situations that are adapted for them they are hardy from at least Boston south. It is not, however, so much a question of temperature as suitable conditions. The first requirement is a deep, well drained soil, absolutely free from lime and alkali and if possible one of a peaty nature. The best fertilizer is well rotted cow manure, with a liberal supply of sand. This does not mean that they do not grow in loamy soils, far from it. Good turfy loam that is not too stiff and heavy will do almost equally as well.

One of the essentials is that the ground should be kept constantly moist without stagnant water at the roots. Unless the ground is exceptionally well drained it is best to dig out very deeply, say  $2\frac{1}{2}$  to 3 feet, and put in a layer of broken stone or brick to insure good drainage. This should

be covered with good turfy loam and filled up with equal portions of leaf soil or peat and a liberal quantity of well rotted manure and sand thoroughly incorporated together.

It will be readily recognized that this mixture will naturally be porous so that an abundant supply of moisture should be given.

Another essential to success is protection from prevailing cold, drying winds. Exposure to the sun does not hurt them as the writer has seen them doing equally well with full southern exposure. Also in positions where they were shaded at least a portion of the day.

They differ from most plants cultivated in the nursery by objecting to cultivation to insure moisture. The reason for this is that they are very shallow rooted plants and cannot be grown in nursery rows where the harrow is depended upon to keep the soil loosened up in the dry weather to form a mulch. They are far better grown in beds where they can be hand cultivated and a mulch given in dry weather. If the conditions under which our native *rhododendron maximum* are found growing are studied, it will be readily seen what the essentials are. These conditions perhaps are rarely found in a commercial nursery so would, to a great extent, have to be artificially produced.

Nearly everyone is familiar with the *Rhododendron maximum*, or Rose Bay, which flowers in July and August. These are being collected from the woods by the carload and in time will doubtless become very scarce unless some steps are taken to propagate and grow them in the nurseries.

The *Rhododendron* Hybrids approach nearer to our native *Rhododendron Catawbiense*, which grows wild in the mountains of North Carolina and other portions of the south. It differs from the *R. maximum* in flowering in May.

All the hybrids, however, are varieties of *Rhododendron ponticum* but they have been so crossed and recrossed with other species and varieties that their original parentage has almost entirely been lost. Some varieties are much hardier than others. The following have been found to be the hardiest and best adapted to the American climate:

*Album elegans*, white tinged pink in the bud; *album grandiflorum*, white, tinted blue; *atrosanguineum*, rich blood red; *Blandyanum*, rosy crimson; *B. W. Elliot*, deep rose; *Caractacus*, crimson; *Chas. Bagley*, cherry red; *Chas. Dickens*, scarlet crimson; *Delicatissimum*, blush white; *Everestianum*, rosy lilac; *General Grant*, crimson; *Giganteum*, cherry red; *Gloriosum*, white, tinted violet; *John Walter*, rich crimson; *Lady Armstrong*, red; *Lady Clermont*, rosy scarlet, spotted; *Lady Gray Egerton*, silvery white; *Michael Waterer*, bright scarlet; *Mrs. J. Clutton*, white spotted yellow; *Mrs. Milner*, rich crimson; *Old Port*, claret red; *Parsons grandiflorum*, dark red; *Purpureum elegans*, purple; *Roseum elegans*, light rose.

Imported *Rhododendrons* when received from abroad invariably carry a very good ball of earth and are usually well budded. This ball should never be allowed to become very dry. It is a good plan when unpacked if they appear to be in a dry state to soak them in water before planting.

As a rule nurserymen who import *Rhododendrons* do so with the object of selling them the same season rather than

attempting to grow them on the nursery and if properly handled they will make a good showing the first spring independent of what they will do eventually, so one might say the buyer gets his money's worth even if they eventually die.

While perhaps this state of affairs suits the florist who forces them for decorative plants, it does not exactly fit in with the nurserymen's object of selling plants, that is to grow and thrive after they have been planted.

As a rule *Rhododendrons*, even when grown under the most favorable conditions will rarely produce a full crop of bloom each year. There is usually the year of plenty followed by one in which they have very few flowers so that the one following their importation is usually a barren one as the plants have little time to recover and form new buds. With this fact in mind it is well to give every encouragement to their growth, not allowing them to become really dry at any time or subject them to uncongenial conditions while they are waiting to be sold.

The new shoots which will carry the buds for the succeeding year are developed immediately beneath the flowers so that as soon as the flowers are faded they should be removed so as to encourage the plants to make all the growth possible early in the season, which will permit the leaves to become thoroughly hardened and so enabled to stand the rigors of winter.

### A NURSERY WITH AN IDEAL

Along the electric car line, two hours run from Cleveland and just before entering Painesville, is the nursery of Martin Kohankie, not much more than ten years old but already known as a good place to buy hardy herbaceous perennials. While Mr. Kohankie grows a few of the woody shrubs, etc. his specialty is the hardy perennials. When a business devotes all its time and energy to one line it usually produces good stuff.

Starting with about three acres the nurseries now number over 50, not all planted but steadily increasing.

The lines Mr. Kohankie has laid down for himself are "Grow only good things and grow them well" and a view of his nursery shows he is succeeding admirably. *Paeoneis*, *Iris*, *Phlox* in few varieties but they of the best. According to Mr. Kohankie the future of the business depends largely upon bringing the best varieties out of the confusion in nomenclature, growing them in quantity so that the average buyer will have a chance to become acquainted with them. There is plenty of room for the fancier who delights in numerous varieties, but the big retail men want large quantities of good things.

Among the good things he is growing in quantity are Meehans' Mallow Marvels, *Salvia Pitcheri*, *Senecio pulcher*, *Iris pallida Dalmatica*, *Iris siberica* Snow Queen, *Phlox Von Lassburg*, *Paeonia Jules Elie* and *Paeonia Festiva Maxima*.

Wick Hathaway, Madison, Lake Co., Ohio, writes: "I am moving hundreds of bushels of Raspberries at fine prices. The Raspberry plant trade ought to begin to boom with such a demand for the fruit."

# NURSERYMEN'S PROBLEMS IN FUNGOUS AND BACTERIAL DISEASES

**Paper Read by Prof. H. S. JACKSON, Plant Pathologist, Oregon Agricultural College and Experiment Station, at the Portland Convention**

It is not my purpose today to discuss at any length the various diseases which affect nursery stock, but rather to outline as briefly as possible some of the general problems which confront nurserymen in connection with losses caused by fungous and bacterial diseases or with the dissemination of these diseases through nursery stock. My observations have been that in general nurserymen are more up-to-date in regard to the control of insect pests than of fungous and bacterial diseases. This is probably due to a better understanding of insect troubles in general on the part of nurserymen, and I believe that it is also largely due to the fact that with few exceptions there is a more rigid inspection for insect troubles than for fungous diseases.

It is a fact, however, that there are certain very serious troubles of nursery stock some of which like the crown gall and hairy root cause a great deal of loss to the nurseryman, and others which perhaps cause minor losses but are important because of the possibility of their being commonly distributed through nursery stock and thus disseminated widely throughout orchard sections.

There are two reasons why nurserymen should be interested in these troubles. Probably the primary one from the nurseryman's standpoint would be because these troubles cause financial loss to himself. There is, however, another reason fully as important. The nurseryman should be thoroughly familiar with the various troubles and should make every possible effort to control them in order that he may establish and maintain a reputation among growers for sending out stock free from disease. There is a great deal of complaint among growers that certain diseases are introduced into their orchards through nursery stock. This is especially true when any trouble appears in a young orchard. It is undoubtedly true that most of such accusations are unfounded. It is also certain that in many cases certain serious diseases are disseminated through nursery stock. This may be entirely unintentional on the part of the nurseryman. He may not even be aware that the particular disease in question exists in this stock. In fact there is altogether too little known by anyone, not only by the nurseryman, but on the part of experts in plant diseases as well, in regard to the diseases that are disseminated in nursery stock and just how general these troubles are. For example in the Northwest complaint is often made that apple tree anthracnose is disseminated in nursery stock. It is entirely possible for this disease to be disseminated in this way and undoubtedly some cases do occur, but I do not think that any one is in a position to say just how much or how little dissemination occurs.

There is another trouble which is very common in the orchards of the Northwest and which seems to be becoming more common, known as the "mushroom root rot." We

know nothing at the present time regarding the dissemination of this trouble through nursery stock though it is possible that it might be disseminated in this way.

I mention these points not with the idea of criticising nurserymen, but rather to point out the fact that there are certain important problems here which need investigation and which should be of vital interest to the nurserymen.

Inspection of nursery stock is becoming more general and more rigid each year. Often shipments have been condemned on suspicion, in many cases without sufficient scientific information to justify such a decision. Would it not be better if investigations could be made before the nurserymen are forced to enquire into the facts after having their stock condemned?

Plant Pathologists all over the country are making investigations regarding plant diseases in general. Their work, however, necessarily deals primarily with the problems of the growers. Very little attention has been paid by them to the problems which are purely the problems of the nurserymen. It is only where the interests of nurserymen and the grower overlap that extensive investigations have been made, consequently it is probable that there may be important diseases especially here in the Northwest, which may be causing considerable loss to the nursery industry. An investigation of these general troubles by an expert plant pathologist might reveal many ways in which losses to the nurserymen could be reduced and would certainly result, in many cases, in the production of cleaner and better nursery stock.

There is a tendency among many nurserymen to believe that fumigation is a cure all, and, that, after complying with the requirements for fumigation the stock should be clean of all insect pests and plant diseases.

I wish to call your attention to the fact that fumigation is useless as a control measure for many fungous diseases, especially any which are carried over the dormant season in the tissues of the plant. Many such troubles may be controlled, however, by careful spraying in the nursery. To give a specific instance, a disease known as California peach blight which is very prevalent in certain sections of the Northwest is undoubtedly widely distributed through nursery stock. This disease appears as small purplish spots on the twigs or small cankers around the buds. The fungus would be carried over winter in the tissues of the bark. No method of fumigation would kill the fungus in that condition. The disease, however, may be readily controlled by proper protective spraying methods which would prevent the disease from obtaining an entrance to the tissues.

Probably the disease which has received more attention than any other both by the nurserymen and fruit inspectors



is the trouble known as "crown gall" or "root knot" and "hairy root." These diseases have been the subject of extensive investigation by many plant pathologists, particularly by the Department of Agriculture at Washington, D. C. No doubt many of you are familiar with the excellent bulletin written by Professor Hedgecock and published as bulletin 186 of the Bureau of Plant Industry, dealing with the field study of crown gall and hairy root of the apple tree. I do not wish to discuss this bulletin except to call attention to certain of the conclusions made as a result of the very careful investigation work which Mr. Hedgecock carried out. After showing by careful experiments that apple trees affected with the crown gall or hairy root, when planted in the orchard, frequently, and in fact, in the majority of cases develop into apparently healthy normal trees, he makes the statement: "If the growing of nursery stock were confined to apple trees, inspection for crown gall would hardly be found necessary. Since this disease attacks and kills grape vines, raspberries, and probably peach trees, and since it may be communicated to them from apple trees, it is clearly the duty of a nursery inspector to insist that apple trees diseased with crown gall should not be sold. It is best to include in the same category apple trees diseased with hairy root." I mention this because I understand that quite a number of nurserymen in various sections of the country have started experiments with the idea of determining whether apple and other fruit trees diseased with crown gall and hairy root will later compare favorably with healthy trees in the orchard. This is excellent work and there is no doubt that the more experimentation of this kind we can have the sooner will we be upon the right track in regard to the crown gall situation. Indeed the department which I represent is co-operating with the Oregon Nursery Company in carrying out an extensive experiment of this sort in which nearly 4000 trees are used.

I think it would be well, however, to consider carefully just what is the purpose of these experiments. Are we endeavoring by such experiments to convince scientists and fruit inspectors that crown gall and hairy root of the apple are of no importance as orchard diseases? It is probable that the results of many of these experiments will show that there is no difference after ten years between the trees which were diseased and those which were healthy. Even if this is the result how are we to alter the facts, as stated in the above quotation, referring to the intercommunicability of this disease to other fruit crops? The work of Dr. Erwin F. Smith published in full in bulletin 213 of the Bureau of Plant Industry establishes beyond a doubt the bacterial nature of this disease and the fact that it is communicable from one fruit crop to another. There are many records from reliable authorities showing the danger of planting certain fruits on the same ground where other fruits have been taken up because of the serious infection of crown gall. It would seem to me that we must take these facts into consideration when planning experiments. Would it not be better to spend our time and energy in more extensive field of study of the interrelation of this disease to its various hosts, and especially be devising methods by which the percentage of infection in nursery stock may be reduced?

It does not seem improbable that certain inexpensive changes might be introduced into the nursery practice which would reduce materially the percentage of trees affected with crown gall.

Perhaps the most important field of work for the nurserymen, however, would be the development of a sentiment in favor of more uniform inspection laws. With reference to crown gall I see no reason why there should not be a uniform national law in this respect, the inspection in one state should also be accepted in another state. Such a condition would be welcomed by the orchardists as well as by the nurserymen. If this were done, however, it would be highly important to have the inspection service improved by requiring that inspectors have some technical knowledge of the various fungous diseases and insect pests which affect nursery stock and fruit trees in general. All inspectors should be required to take an examination as to their fitness, or better should be required to pursue a special course of training preparatory for the work. Incidentally the wages should be increased in order to make it worth while for interested persons to take the necessary training.

My observation has been that more trouble and misunderstanding come about by unscientific inspection than by too rigid inspection. On present knowledge all up-to-date nurserymen will agree with me that trees affected with crown gall and hairy root should not be planted by the grower and should be thrown out by the inspector. Only diseased trees, however, should be discarded. It is, therefore, highly important that every inspector know crown gall thoroughly and scientifically. I do not believe, however, that trees, especially in the case of apples, should be discarded on mere suspicion.

In connection with the general nurserymen's problems the question arises as to just what is the best method of working out these problems. On account of the fact that the time of our experiment station workers is entirely taken up with the producers problems, it is difficult for them to arrange to make special investigations of the nurserymen's problems. In fact it is a question, on account of the nature of the industry, whether experiment stations would be justified in using any large portion of state funds to investigate these problems. It would seem, therefore, that it would be most desirable for the nurserymen to take up the matter of investigating these problems themselves. This work, however, should, if possible, be carried on in co-operation with Agricultural Colleges and Experiment Stations. Certain experiments, especially any whose purpose is to influence the rigidity of inspection which are carried out independently by the nurserymen would have little weight with the people whom they wish to convince.

One of the best methods of working out the problems of a special industry such as the nurserymen's is that adopted by the New York (Cornell) Experiment Station. The Plant Pathology department of that Institution has arranged for the establishment of what they term "Investigatorships," or "Industrial Fellowships." Several of these Investigatorships have already been established, and some of them have been in successful operation several years. One of these has been in co-operation with various nursery companies for the

investigation of the method of control of the fire blight which is a serious nurserymen's problem in New York state. Under the terms of this Investigatorship the Association or company wishing the work done provides funds for the hiring of one or more assistants whose duty it shall be to investigate thoroughly the problems in question. The work is under the close supervision of those in charge of the Department of Plant Pathology at the Experiment Station who outline the work and give advice and direction as needed. The final results are published and thus become available to all concerned.

It occurs to me that this is the best method of taking up the problems of the nurserymen. Under this method the nurserymen of any particular state could co-operate in raising a fund for the investigation of problems which might be peculiar to the conditions of that state. This same method could also be applied to the investigation of nursery problems other than those relating to plant diseases.

### CHESTNUT BARK DISEASE

This disease was first recognized as serious in the vicinity of New York City in 1904 though it may have been on Long Island ten years earlier. It appears ultimately to exterminate chestnut trees in any locality which it infests. The chestnut trees in the southern part of Westchester county, Bronx Park, Prospect and Forest Parks and the western end of Long Island are dead or seriously infected. To the north and east of these sections, the disease has become generally prevalent and infected trees are found on both sides of the Hudson river as far north as Saratoga and Washington counties. Diseased trees have also been found in Livingston and Allegany counties. It is believed that there may be other portions of the chestnut belt of the State where the fungus could be found. At present about one-third of the chestnut growing area of the State is involved. Expensive experiments for the control of this disease have not been undertaken by this or other States where the disease has become distributed except in Pennsylvania where a commission provided with ample funds has been working for two years to devise a practicable plan by which the large areas of uninfected chestnut timber might be saved. \*The work of the Pennsylvania Chestnut Bark Commission has taken the broadest possible scope and everything that suggested itself as a preventive or a cure of the disease has been applied, but up to this time the Commission has reported no plan that seems to warrant adoption in this State. When a working scheme is devised that promises good results it should be energetically applied in this State. Whenever the disease appears in single trees or even in groups of trees, they should be cut and the bark at once removed and burned after which the timber is believed to be safe to use. Whenever large numbers of trees are infected, the trees should be cut before they die in order to save the timber at its best, and all bark should be burned at the place of cutting. For further information address Calvin J. Huson, Commissioner of Agriculture, Albany, N. Y.

\*Governor Tener has vetoed the bill, so the Chestnut Tree Blight Commission goes out of existence.—ED.



### MORE INSPECTION

A bill has lately been introduced into the House of Representatives by Congressman Raker under HR4357 reading as follows:

#### A BILL

To provide for the inspection of any parcel sent by mail which contains fruit, plants, trees, shrubs, nursery stock, grafts, scions, Peach, Plum, Almond, or the pits of other fruits, Cotton seeds, or vegetables, at point of delivery in any post office of the United States that requests such inspection and where the requisite inspectors are provided by the States to perform such service.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled.

That it shall be unlawful for any postmaster or postal clerk to receive any parcel containing fruit, plants, trees, shrubs, nursery stock, grafts, scions, Peach, Plum, Almond, or the pits of other fruits, Cotton seed, or vegetables to be sent by mail except that the same be plainly labeled, which label shall not only give the character of the parcel, but also the name of the person who produced it and place where grown, if possible; also the name of the sender. It shall also be unlawful for any postmaster or postal clerk to deliver at any post office in any State any parcel containing fruit, plants, trees, shrubs, nursery stock, grafts, scions, Peach, Plum, Almond, or the pits of other fruits, Cotton seed, or vegetables until the same has been inspected by a regularly appointed fruit inspector provided by the State, and it shall be the duty of the postal officers to appraise said fruit inspectors of the presence of such parcels. It shall also be unlawful for any postmaster or postal clerk to deliver such parcel until it is released by such regularly appointed fruit inspector, who certifies that it is free from injurious insects and injurious fungi. In case any State desires inspection at destination, it shall be divided into a reasonable number of inspection districts, to be determined by the joint action of the Agricultural Department and the state authorities, and that in each of such inspection districts there shall be designated a point of inspection, and that all nursery stock coming through the mails shall be routed through such inspection point and there subject to inspection prior to reshipment to destination, and in this case, immediately after inspection, the parcel shall be carefully rewrapped and remailed to the consignee in case it is free from pests, and otherwise treated and destroyed as the State officials shall direct.

A more effective method of making the parcel post valueless to the nurseryman cannot be conceived. The plant disease and insect pest bugaboo certainly must loom large in the eyes of some of our legislators. It is a great pity that such legislators could not be required to work on a nursery so as to get actual information concerning plants and plant diseases. We hardly think it would take twelve months actual contact with plants to recognize how futile and silly such a bill would be. It has been truly said this country would be very much benefited if the legislators could have a long holiday.

# The National Nurseryman

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Official Journal of American Association of Nurserymen

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

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Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Address, Editor, Flourtown, Pa.

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ROCHESTER, N. Y., AUGUST, 1913.

## AMERICAN ASSOCIATION OF NURSERYMEN

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CO-OPERATION WITH ENTOMOLOGISTS—L. A. Berckmans, Augusta, Ga.

PROGRAM—Samuel Miller, Milton, Oregon.

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## STATE AND DISTRICT ASSOCIATIONS.

American Nurserymen's Protective Association—President, Henry B. Chase, Huntsville Ala.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.

American Retail Nurserymen's Protective Association—President, Charles J. Brown, Rochester, N. Y.; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.

Association of Oklahoma Nurserymen—President, J. A. Lopeman, Enid, Oklahoma; secretary, C. E. Garee, Noble, Oklahoma.

California Association of Nurserymen—President, Frank H. Wilson, Fresno, Cal. Secretary, H. W. Kruckeberg, Los Angeles, Cal.

Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.

Connecticut Nurserymen's Association—President T. E. Burroughs, Deep River, Conn.; secretary, F. L. Thomas, Manchester, Conn.

Eastern Association of Nurserymen—President, Wm. C. Barry, Rochester, N. Y.; secretary-treasurer, William Pitkin, Rochester, N. Y. Meets annually in January.

Idaho Nurserymen's Association—President, W. S. Hawkes; secretary, J. F. Litooy, Boise, Idaho.

Mississippi Nurserymen's Association—President, J. R. Woodham, Newton; Vice-President, W. A. Woods, Tomnolen; Sec'y-Treas., R. W. Harned, Agr. College.

National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.

National Nurserymen's Association of Ohio—President, W. N. Scarff, New Carlisle, O.; secretary, W. B. Cole, Painesville, O.

Oregon—Washington Association of Nurserymen—President, C. F. Breilhaup, Richland, Wash.; secretary, C. A. Tonneson, Tacoma, Wash.

Pacific Coast Association of Nurserymen—President, Albert Brownell, Portland, Oregon; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Meets annually in June.

Pennsylvania Nurserymen's Association—President, Abner Hoopes, West Chester, Pa. secretary, Henry T. Moon, Morrisville, Pa.

Southern Nurserymen's Association—President, W. A. Easterly, Cleveland, Tenn.; secretary-treasurer, A. I. Smith, Knoxville, Tenn.

Tennessee Nurserymen's Association—President, E. W. Chattin, Winchester, Tenn.; secretary, G. M. Bentley, Knoxville, Tenn.

Texas Nurserymen's Association—President, J. R. Mayhew, Waxahachie, Texas; secretary-treasurer, John S. Kerr, Sherman, Texas.

Western Association of Nurserymen—President, Frank A. Weber, Nursery, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

## NURSERY INSPECTION

As William H. Stark said in his paper, read at the annual meeting of the American Association of Nurserymen at Portland, "Inspection is a good thing. We must have it but let us have it in a form that will do the most good."

Just at the present nursery inspection is very unsatisfactory and entails considerable loss, delay, and works a hardship in many instances.

Even the most rigorous inspection in force in any state if it be made uniform in all the states would be a great deal better than the present chaos. Good things do not come easy. They must be striven for and it will no doubt be a monumental job to get the 48 states all of one mind so as to accept a uniform inspection law.

The idea of uniform inspection laws is so good and desirable that it must ultimately come as there is probably nothing antagonistic to it and we look for its ultimate adoption. The main thing is to agitate for it in every way possible and so educate the people and law makers to its advisability.

Mr. Stark made a suggestion by which it could be accomplished by federal aid. The main problem seems to be the necessity of overcoming the deadly inertia of such movements where only a few people are apparently vitally interested.

It hardly seems possible to make good progress through political channels. Perhaps it may be possible through the state colleges and agricultural experiment stations, who really have the actual work of inspection in hand. If every nurseryman would try to interest his own state department of agriculture in the movement it would be a great step towards bringing the matter to a focus under the management of the United States Department of Agriculture. If all these bodies accepted a uniform standard and this was approved by the federal authorities there is little doubt but that the law makers would be ready to adopt it.

Why should not the horticultural interests of our different states acknowledge a governing body in the personnel of the United States Department of Agriculture and frame their laws according to a single standard?

It works well with such well governed bodies as the Roman Catholic Church, the Masonic fraternity and our own Federal Government under the Constitution.

The Commonwealth of Horticulture should have a head capable at least of guiding the whole body instead of about forty-eight tails wagging in different directions.

It is poor salesmanship and poorer business policy to run down or belittle a rival and seldom gives permanent results.

The average customer usually sees through such a shallow practice and invariably discounts the statements to the disadvantage of those making them.

Even if the statements are true it is best to leave them unsaid.

If your competitor is not doing a straight business he will come to grief without your assistance and you are only laying yourself open to being classed with the unprincipled.



Every nurseryman worthy of the name thinks his is the only nursery and every salesman should believe he is selling the very best stock in the country. If he does not believe it himself he is not likely to be able to convince others. This, however, does not require that he should disparage the goods of his competitor. It is a good rule that if you cannot commend the goods or methods of a competitor to say nothing at all about them.

#### WHY UNIFORM INSPECTION LAWS?

Uniform Inspection Laws would insure the laws being obeyed, because carriers and transportation companies could become acquainted with them.

They would be equitable and efficient.

They would be a tremendous saving in labor and expense to the nurseryman, also in their own administration.

They would enable the government to make an effective quarantine should occasion require.

They would insure the co-operation of nurserymen because each and every one would be working under the same laws.

They would enable the nursery business to develop along broad lines to the welfare of the whole country instead of catering to narrow local interests.

They would be a great step towards defining the government's work in horticulture apart from commercial interests.

They would tend to give a broad competition in the products of the soil so that each locality would receive benefits from others.

They would insure and make possible the training of effective inspectors.

They would make it possible to better control nursery and garden produce carriers when handled by the interstate carriers.

#### THE NURSERYMAN AND THE ENTOMOLOGIST

THE NATIONAL NURSERYMAN has persistently pointed out that the Entomologists should not have dictatorial power over nursery interests as is the condition at present.

Plant diseases and insect pests are more often the result of poor cultivation or ignorance of plant life than infection.

To use the words in the report of the Joint Committee on Uniform Horticultural Laws, "and inasmuch as it is a well settled fact that depleted soils invite enemies, such as insects and diseases, fungus and bacterial elements (which is in accordance with the natural laws provided for the elimination of all unfit plant life) etc.

The above expresses the reason in a nutshell. Quarantine laws will never be effective, legislation will never help to prevent disease or help to control insects unless such laws are in harmony with the laws of nature. The most successful grower is the one who understands nature and knows how to humor her and the most successful law for prevention of disease will be the one that is framed according to the best knowledge of the practical grower and biologist combined.

Just at present our laws originate from various causes, a desire for the welfare of the common people, a little knowl-

edge of some biologist in power, political exaggeration of dangers to the common welfare to ensure the necessary appropriation, the ever-present human weakness of official jealousy, swelled head and excusable ignorance.

If the first cause were the only one how different would things be? The second reason is excusable as the field of biology is so vast. The theory of spontaneous generation may have been discarded but it is only replaced by the cell theory and the doctrine of evolution. Both of these are yet but mere theories which in time will be replaced by exact science.

It is unfortunate that our Agricultural Departments and State Colleges have very often to depend on political influence to gain the necessary money to carry on their good work, but political influence should not be purchased at too high a cost.

Last and not least, we are all human and in the chaos of present conditions the dignified service for the public good is not always the dominant inspiration.

The nurseryman needs the assistance and co-operation of the biologist and the entomologist. He especially needs it in educating in proper methods of horticulture and moulding public opinion. They are closer in touch with the government and can do much toward helping to frame practical, sensible laws, but they should not forget that production is the great object which keeps the world alive and that the study of disease, insects is destruction and only helps production indirectly and as such it should be subordinate to horticulture.

A circular letter was received by the NATIONAL NURSERYMAN asking the support of this journal in the work of organizing rural interests, to encourage and help in the constructing work in the way of marketing, buying supplies, grading and standardizing products, etc. While the NATIONAL NURSERYMAN is perhaps a journal that can do but little among the laity, we can at least work toward a standardization of grading our own products and every movement in this line is a forward one. A rural organization service, under the jurisdiction of the Department of Agriculture, is beginning a card catalogue of all such organizations which they will put at the disposal of those that are interested in assisting in the great work.

#### INFORMATION WANTED ON ROOT PRUNING

I should be pleased to learn through your columns if there is a nursery tool, and where same can be had, for clipping back roots of trees where one does not wish to transplant them. Or, in what manner is this work generally done between rows three feet, four feet and six feet respectively? The trees run from one and one-half to four inches caliper.

Will some of our readers give this information? J. V.

Dear Sirs:

Replying to your favor of June 20th I am sending a P. O. order for \$1.50 as subscription up to June 1914 for the NATIONAL NURSERYMAN.

Your paper is of great value to me and I do not want to miss it.

Yours truly,

DARMSTADT, July 2d, 1913.

PPA. CONRAD APPEL.



DELEGATES TO CONVENTION OF THE AMERICAN ASSOCIATION

## Answers to Correspondents



We have a block of apples that were budded last fall and are now ready to stub. Heretofore we have been stubbing about two inches above the bud, and then when bud had grown to about ten inches, we would restub close to the bud.

Now if we can overcome the restubbing we would like to. Would it be advisable to cut the seedling off close to the bud at this time and let the one cutting suffice for all? or would you think best to wait till just as the buds are starting to grow?

Just before the buds begin to push cut the stubs off even with the top of the bud. One cutting is all that is necessary and you can readily understand it saves a good deal of time.

Please advise me through your columns how to grow holly bushes from berries?

To be successful in germinating Holly berries they should be stratified for a year before sowing. The best way is to put the quantity you intend to sow in flower pots, covering the flower pots with a piece of slate or tile and bury them in the ground. Be sure to select a position where the ground is not too wet and where water will not accumulate during the winter.

The following spring, as soon as the ground can be worked, they should be dug up and sown. They will come up the same season in April or May. When fresh berries are sown they seem to germinate very indifferently, only few coming up at a time. It very often happens that a great portion of the seed practically lies dormant for a year.

### FAIRMOUNT PARK COMMISSION ISSUES REPORT ON THE STREET TREES OF PHILADELPHIA

Oriental plane, pin oak, ginkgo and Norway maple, according to the Fairmount Park Commission, are the best kinds of trees to plant in city streets. So far as Councils' appropriation for the purpose will go, the commission is

ready to aid any residential section to plant, care for and improve street trees, under certain regulations, in creating a "city beautiful."

Indiscriminate planting of these trees is a haphazard arrangement, incompatible not only with beauty, but even with neatness, the pamphlet declares; while under such supervisory control as the commission is empowered to exercise trees can be planted, protected and cared for in a systematic way more cheaply and efficiently than would be possible by individual effort.

After stating that only a few kinds of trees will grow satisfactorily in our streets and that the California poplar and silver maple, which are most frequently used, are almost entirely unsuited to the purpose, the commission suggests the kinds of trees best suited and submits its plans for aiding in planting trees in residential sections and the wider thoroughfares.

It is the intention of the commission to plant a certain number of streets with trees each year, protecting each tree with a guard. The first streets to be treated will be Spring Garden street between Broad street and Fairmount Park, and Broad street from Spring Garden street to South street.

The commission is not prepared at present to plant isolated trees for individual property owners, but will issue specifications as to how such work shall be done, and will detail inspectors to supervise the planting. Existing trees will be sprayed, pruned, cleaned and put in order or removed by the commission as rapidly as funds will permit. Expenses of removal of condemned trees and the planting and protecting of new trees will be charged to the property owner at cost.

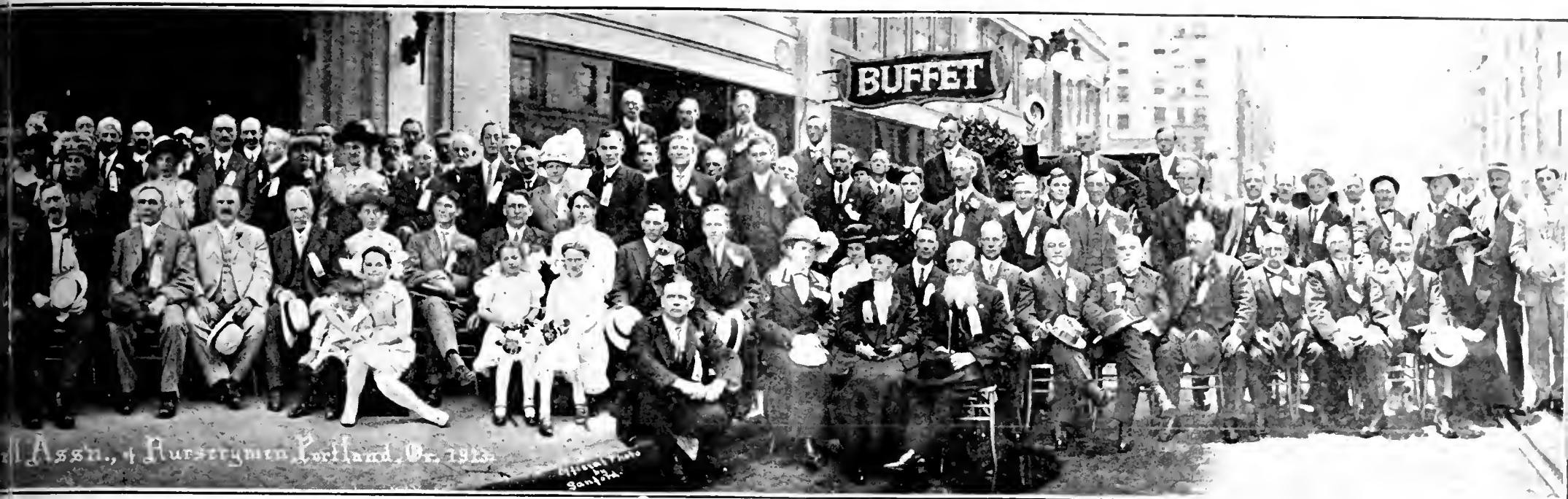
As to subsequent care of trees, the commission's pamphlet gives much detailed information.

### A CORRECTION

On page 262 in our July issue appeared the picture of M. McDonald. The inscription under it read "W.A. McDonald, President Washington Nursery Co., Toppenish, Wash."

It should have read "M. McDonald, President Oregon Nursery Co., Orenco, Oregon."





NURSERYMEN, PORTLAND, OREGON, JUNE 18, 19 and 20th, 1913

### ABSTRACT OF NEW MINNESOTA INSPECTION LAW

1. The State Entomologist is authorized to inspect all nurseries in the State; also all orchards and all premises private or public when he has reason to suspect the presence of injurious insects or dangerous and contagious plant diseases. He can establish quarantine or order destruction of infested trees, shrubs, or plants if in his opinion it is necessary to do so.

2. Inspection shall take place between May 1st and September 30th, or at such other times as the Inspector may feel such inspection necessary. Application for inspection shall be made to the State Entomologist, as far as possible on or before May 1st of each year.

3. "Nursery stock" includes all field grown plants (except herbaceous annuals) of any kind, and trees, shrubs, vines, cuttings, buds, grafts and scions.

4. Express companies and other carrying companies in Minnesota which accept any nursery stock consigned to any point whatever within the state, not accompanied by inspection certificate, are liable to prosecution under the provisions of the Act, and such companies have notified their agents accordingly.

5. A flat fee of \$5.00 each year will be charged each nurseryman, payable at the time of inspection.

6. No nursery stock is allowed to enter the state without an official certificate from the state where grown.

7. A copy of the State inspection certificate granted to any firm or firms in any other state must be on file with the Minnesota inspector before any such firm or firms shall make shipment of nursery stock to be sold or distributed in the State of Minnesota.

8. All shipments within the State must be accompanied with certificate of inspection upon each package. (See No. 4.)

9. Foreign grown stock (field grown in Europe or other foreign countries) imported under the provisions of the Federal Quarantine Law is regarded as nursery stock and must be inspected at points of destination. It is unlawful to open any package of such stock unless inspector or deputy is present.

10. Dealers or florists not owning nurseries and shipping by post, freight or express, may obtain from inspector a

special certificate granted only upon stock purchased in Minnesota.

11. Failure to comply with any of the provisions of this Act subject to penalties provided in Section 2389 Chap. 38 Revised Laws of Minnesota, 1905.

F. L. WASHBURN, State Entomologist.

### ATTACK THE PARCEL POST

Editor NATIONAL NURSERYMAN:

Those of your readers who have observed recent newspaper reports which seem to indicate a very serious effort on the part of the express companies to kill the parcel post have doubtless wondered what could be done to prevent such a catastrophe, but it is not enough that we simply express either surprise or regret at such a move. If the work of years is to be conserved it becomes imperative that every member of the American Association of Nurserymen, as well as any other nurseryman, florist or seedsman fight, if we shall hold that which was so dearly gained. The proposition is to strike out the "administrative powers" clause of the parcel post law. And should this effort be successful the vital force of parcel post will be killed; its further expansion will be prevented, and the work of the years will be lost. We again urge upon every interested reader to write to the senators of his own state, to his congressman, and to the Postmaster General demanding that the law be let alone, and that the service of parcel post be extended.

Yours very truly,

JOHN HALL.

Secretary American Association of Nurserymen

THE NATIONAL NURSERYMAN,  
Rochester, N. Y.

On June the first, W. P. Bates severed his connection with the Ohio Nursery & Supply Company, of which he established and has managed for the past seven years.

Mr. Bates will devote all of his time with the Horticultural Selling Company in which he has been interested for the past two years. This firm does a wholesale and retail business, in both American and imported nursery stock, with headquarters at Elyria, Ohio. W. P. BATES.





#### A REMINDER OF WESTERN HOSPITALITY

Lunch Prepared for the Delegates to the Convention of the American Association of Nurserymen,  
by the Oregon Nursery Co., Orenco, Oregon

#### SOUTHERN NURSERYMEN'S ASSOCIATION

The 16th annual meeting of the Southern Nurserymen's Association will be held at Mont Eagle, Tennessee, August 27th and 28th. There will be no side trips planned until after these two days meeting of the Association.

Mont Eagle is quite a noted summer resort in the Cumberland Mountains. Aside from the natural attractions of the place it is in close proximity to some noted nurseries at Winchester, Tenn., Huntsville, Ala. and Chase, Alabama. The nurserymen at these places are preparing to entertain visiting members with true Southern hospitality.

The annual dues of the Association are \$2.00, and if you will send check or money order for that amount to the Secretary and Treasurer, A. I. Smith, Knoxville, Tenn., he will promptly receipt you for the amount and will send you, in due time, program of the meeting. If you have any questions that interest you, or about which you want to get information, send such questions to the Secretary and he will see that they are incorporated in the program for this year's meeting.

The headquarters of the Association will be at the Assembly Inn. They have quoted a rate of \$1.50 to \$2.00 per day, American plan. Besides the Assembly Inn, there are other splendid hotels where accommodations can be had.

We desire to make a specialty of our exhibits. All articles for exhibition should be addressed to the Southern Nurserymen's Association, Mont Eagle, Tenn.

Take a few days rest and attend the Convention before you get into the fall rush. Help us make this the best Association in the country, and we can do it with your help.

Remember the date, August 27th and 28th, and do not forget to write to A. I. Smith, Secretary and Treasurer, Knoxville, Tenn.

H. W. Gottschalk, Rochester, N. Y., has joined the force of the Burr nurseries. He is to have an interest in Heath & Co., an auxiliary of the Burr company. Mr. Gottschalk has been connected with the Charlton Nursery Company of Rochester for eight years, the last five as sales manager.

# THE PROPER HANDLING OF BERRY PLANTS

Paper Read by L. J. Farmer, Pulaski, N. Y., at the Portland Convention

## THE DUTY OF THE NURSERYMAN

Of the millions upon millions of berry plants bought and sold during every season, there is a large proportion spoiled by improper handling and care, due largely to ignorance. If plants are spoiled by handling, not only is their first cost thrown away, but the use of the land that they are set upon and the crop of fruit that is expected from them is a total loss, and while this is hard to estimate, it is always many times the original cost of the plants. I have been in the fruit and plant business for thirty years, and having been on both sides of the fence am in a position to look upon this proposition rather broadly and I hope that some things that I have observed may be of benefit to others if I may be allowed to tell them before this convention.

### THE DUTY OF THE NURSERYMAN

The man who grows, handles, and sends out berry plants, must be a specialist in that line, in order to produce, prepare for shipment and send out the best stock. He must make growing and shipping plants his main business, not a side issue. The ordinary dairy or grain-growing farmer has no business to go into the business of handling berry plants. It is too fussy for him. The average tree nurseryman whose interests primarily are in fruit trees or other trees, has no sympathy with the small fruit plant business and if he has no sympathy, he is not likely to have much interest. Most tree nurserymen refer to this class of stock as "small stuff" and generally it gets a small share of their attention. Fruit and ornamental trees are largely sent out by freight in big boxes and the ordinary nursery packer cannot be taught to pack small fruit plants in big boxes, along with trees, to stand distant shipment. The only way the tree nurseryman can safely send small fruit plants is by express or mail, separate from the freight shipment, and this annoys him, and most of the tree nurserymen never solicit trade in small fruit plants and if they accept orders, it is only for the convenience of their customers. The principal points to remember in handling and shipping berry plants are that they must be out of the ground as short a time as possible, and while they are out of the ground, they must be carefully kept from drying winds, frost, excessive heat and humidity; and from sudden violent changes in the temperature. A degree of temperature that is uniform and as near the freezing point as possible, is the ideal condition for safely keeping small fruit or berry plants.



L. J. FARMER,  
Pulaski, N. Y.

In digging strawberry or other berry plants, a large part of the smaller rootlets will be utterly destroyed if they are exposed to freezing or very windy weather, while they lay upon the ground, after being thrown out by the fork or spading fork. It is best to avoid days of excessive cold and driving winds if possible, because, with the best of precautions it is almost impossible to prevent some injury to the plants on such days. Dark, dry, discolored roots are the results of handling plants on such days. There are several ways, that the plant digger can choose to avoid the most of this injury, which are very effective, even in the most unfavorable weather.

If plants are thrown out, counted into bunches of 25 plants each, and immediately "heeled in" or buried completely in the soil, the injury by exposure, will be comparatively light. They can be gathered up quickly, just before quitting time and hustled under cover, being protected with blankets meanwhile; or, they may be kept covered until next day, when the weather conditions for handling are more favorable. In digging berry plants, strawberries especially, we often use wet sacks for protecting them with splendid results. If you use one sack, the wind will soon dry it out and the plants are easily injured. When the weather is favorable, neither too cold, too hot, or too windy, the ideal place to look over berry plants is in the open field, handling a bunch at a time, and when this is stripped and tied up, it should be immediately buried in the moist soil, or placed in the wet sack. If plants are taken to the shed for sorting, cleaning and tying into bunches, they must be handled the same day as dug, because strawberry plants start to grow over night, the roots stiffen, and it is twice the work to disentangle, sort and arrange them that it is when they are fresh dug. For digging strawberry plants, we always prefer wide pronged spading forks. They get down below the plants better, enabling us to get out all the roots of the plants; and they tear fewer roots from the young plants in digging than do potato hooks or any other tool that we have tried. The same rules apply in digging the other small fruits, the roots must be kept from driving winds, frosts, and excessive sunshine.

When plants are taken to the packing shed, the sooner they are put up and shipped, the better. When the weather is near the freezing point, they will not deteriorate for several weeks if carefully protected and kept just moist, not wet. If small fruit plants are stored for any length of time, whether



for winter or at any time of the year, they should be kept as cool as possible, just above freezing and at as uniform a temperature as can be maintained. When in storage, the best packing material is old rotten hemlock sawdust or sphagnum moss. The roots must be entirely excluded from the air and light, but any green foliage, like leaves of strawberry plants, must be brought in contact with the light. The packing material must not be wet, it should be just slightly moist. If too wet, it is sure to rot the plants and spoil them. Raspberry, blackberry, currant, gooseberry and other entirely dormant plants with no green foliage on them can be safely packed in large boxes with slightly damp moss or sawdust, and entirely excluded from the air, or they may be stacked up in tiers in the packing house with moss or sawdust placed between the layers as packing. When packing such plants for the winter, unless the temperature goes much below freezing, I would not press them too closely together.

Strawberry plants for storage are best packed in double slatted crates with damp moss, and a slight quantity of earth on their roots. They may be stored out doors during mild weather of late fall or early winter, but during the severest spells of weather, should be placed in the storage house until warm spells come, when they must again be set outside. It is impossible to keep strawberry plants in a house cellar or in any warm damp place during the winter. If it were not for the extreme cold spells, we would rather chance them outside, frozen up, than inside the best storage house in America. It is extremely difficult to store strawberry plants for the winter and have them come out in the spring in good shape. We have adopted a plan of digging large quantities in the fall and heeling them in the soil, just outside the packing house ready to use early in the spring before we can get out on our open fields. During mild spells of the winter, we often are able to shovel off the snow from these trenched-in plants, and get out quantities for shipping to the far south. We rarely ever have any bad luck with the other small fruit plants when placed in storage for the winter. They came out fresh and green, and often in far better condition than plants that are allowed to remain outdoors all winter exposed to the freezing and thawing of open winters such as we sometimes have in our locality.

When strawberry plants are brought to the packing house during the regular shipping season, they should be placed in compartments well labeled, with the roots buried in damp sawdust. If they are stood up on the roots, one layer deep, the plants will keep perfectly for several days, or until shipped out.

In shipping strawberry plants, there are several packages that are satisfactory. For large quantities, there is nothing better than the double slatted crate. This is usually made to hold from 1500 to 2000 plants, depending on the variety and the part of the country they are grown in. Flimsy packages that go to pieces enroute, are no good to ship strawberry or any other kind of plants in, even though they may save the payment of a little extra express charges. Large heavy crates and boxes should be avoided. It makes the receiver mad, when he thinks of the saving that might have been made if the nurserymen had used a little more

judgment in selecting a lighter package. The 32 quart berry crate, such as is used largely for shipping berries along the Atlantic coast, is almost an ideal package for shipping strawberry plants, all such packages must be well lined next to the wood with oiled paper. Small orders of 200 to 500 plants are best packed in, and carry better, in market baskets. The market basket must be well lined with oiled paper and the plants stood up in the baskets, the roots pointing down and well interlaced with damp moss. Every bunch must be entirely surrounded with damp moss and if there is any space not filled out by the plants and moss, it must be filled up with excelsior or straw. The top of the basket must be covered with gauze or coarse burlap to protect plants from too much exposure to the elements and from horses chewing at them while they are standing about express offices or in express wagons. Large orders to very distant points can be most economically sent by express in market baskets. Two sizes can be purchased, the 8 quart and the 12 quart size, to suit different sized orders.

Plants that are to go by mail should be tied in small bunches of 13 plants each, and in packing, the moss should be so arranged that it will entirely envelop each and every bunch. The plants should first be done up in a bundle, using moss for packing material and oiled paper to cover the roots and moss; leaving the tops or leaves of the plants open and exposed to the air. Around this package there must be wrapped a sheet of heavy cardboard so that its edges will extend a little farther out than the leaves of the strawberry plants. This is to protect the leaves and crowns from bruising while in the mails. The whole package should then be wrapped up tight just like a package of sugar; the tag, with address and shipping directions, being bound to the package under the cord; not allowed to swing free, so that any mail clerk can catch hold of it and tear it off. The package is then weighed, parcel post stamps affixed at the rate of one cent to each three ounces, a couple of holes punched through the outer paper to allow the steam and moisture to escape from the leaves and the package is ready to mail. The only way parcel post affects the plant business is that it allows us to send 11 pounds in one package when formerly, we were allowed to send but four pounds. The postage (8 cents per pound) is the same as formerly. We like this uniform rate better than the zone system. By the parcel post, from 300 to 500 plants can be sent in one package, and this is a great saving in long distance shipments. Nothing equals the United States Mail service for "getting there Eli" no matter what are its faults. This taking away of the small packages from the express companies, is going to have the effect of their handling the larger shipments in better shape. The parcel post, no matter what its faults are, is the greatest thing from an economical standpoint that has been done by the United States Government for the common people since I was born. The system will be perfected from time to time until it will be just what we all want.

No matter how plants are packed, they should be properly labeled with wood labels, well and legibly printed or written with indelible pencil. If every bunch is not labeled, the different varieties must be separated and kept apart with



old sacking or waterproof paper. Do not use common thin paper, it will wet and soon go to pieces and the different varieties will all become mixed up, especially if the person who opens the package is inexperienced in opening plants. It is generally better to label every bunch, you are sure of their being all right if the package gets broken open enroute. Crates and boxes must be so made that they won't easily split and go to pieces while they are in transit. A narrow piece of tough half inch lumber should always be nailed cross-wise on the ends of all boxes and crates.

The nurseryman is supposed to have grown, dug and put up good plants in good shape, true to label. It is the duty of the express Company the railroad company, or the mail service, to deliver them to the customer in practically as good condition as when they left the grounds of the nurseryman. This they have generally done in the past with few exceptions, compared to the vast amount of packages they have handled, and which they are very liable to do in very much better shape in the future than they have ever done in the past. The plants arrive at the express office in the home town of the buyer. It is now up to him.

### CHESTNUT TREE BLIGHT

The chestnut tree blight is undoubtedly a serious menace to a large portion of the timber growth of this State. Considerable money has been spent by the State in combating it. The State Commission created for this purpose demanded of the late Legislature \$275,000 for the continuance of its work. The Legislature appropriated \$100,000. On the ground that so small an appropriation was worse than useless the Commission suggested to the Governor that he should veto the bill, and he did so. Thus the Chestnut Tree Blight Commission goes out of existence.

It is perhaps just as well that the Legislature and the miffed Commission between them have put an end to this paternalistic fight on the enemy of the trees. Unless we are mistaken, a large part of the expenditures of the Commission has been devoted to treating and felling infested trees on private property. There is no good reason why the owners of chestnut timber lands should not preserve their property at their own expense.

The outlay of State money to study the blight, to disseminate information concerning the best means of dealing with it, and to curb its ravages on property owned by the State,

is eminently proper. These matters should be functions of the State Department of Agriculture. The treatment of trees not owned by the State is hardly within the line of its duties. If it were, we should have a Potato Bug Commission, with an appropriation of a few hundred thousands to spray the potato fields of the farmers; a Black Rot Commission to fight one of the worst enemies of the grape growers; a Cucumber Beetle Commission, and so on without limit—except the limitations of the Treasury.

If the spread of the chestnut blight should work injury to the innocent owners of chestnut timber who do all that is possible to protect their property, but are victims of the carelessness of adjacent owners, there are ways of dealing with such carelessness through legislative penalization. In the meantime, since the Commission has gone out of business, let the State conduct an inexpensive campaign of education and urge private enterprise to cope with the pest.—“Editorial” *Philadelphia Record*.

There is sound common sense in the above editorial and although presumably written by a layman most nurserymen will endorse it.

The same remarks apply equally well to Government Forestry experiments. There is abundance of territory owned by the state that could use all the tree seedlings they could possibly grow without competing with the legitimate business of the nurserymen by supplying seedlings to private parties.

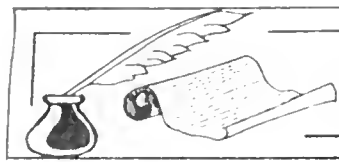
### HORTICULTURE UP-TO-DATE

Most nurserymen are familiar with the old-fashioned idea of clipped Yews and other forms of topiary art. According to the catalogue of P. J. van der Pol & Company, Boskoop, Holland, which has just come to hand this style of gardening has not entirely died out now but it is taking the form of roses trained to represent electric tram cars, Bleriot areoplanes, lady's bicycle, automobile and Zeppelin airship, besides such back number styles as chairs, umbrellas, tables, ships, etc.

Of course, the designs consist largely of frame but it shows considerable patience and skill to train the roses to represent such articles. It also indicates enterprise on behalf of the nurseryman. Perhaps the least said about them from the standpoint of beauty the better.

### “THE MONTHLY SUMMARY OF COMMERCE AND FINANCE” FOR MAY, 1913, GIVES THE FOLLOWING REPORT OF IMPORTS OF PLANTS, TREES, SHRUBS AND VINES.

ARTICLES	MAY—				ELEVEN MONTHS ENDING MAY—					
	1912		1913		1911		1912		1913	
	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values
Plants, trees, shrubs and vines:										
Fruit plants, tropical and semi-tropical, for propagating purposes <sup>2</sup> .....		2,213		2,386				24,820		5,793
Bulbs, bulbous roots, or corms, cultivated for their flowers or foliage .....	139	5,113	42	774		1,622,902	216,152	1,718,746	288,629	1,823,198
All other .....		112,679		102,888		1,080,496		1,237,040		1,357,570
Total .....		120,005		106,048		2,703,398		2,980,606		3,186,561



## Review, Note and Comment.

Adolph Müller, DeKalb Nurseries, Norristown, Pa., writes: "The single roses deserve to become more popular, on June 8th I cut a big bunch of American Pillar placed them in a vase on my dining room table, where they remained until the following Sunday without dropping their petals, they then commenced to fade after being cut and in water for eight days. Don't think I ever saw a more beautiful bunch of flowers, they are far more graceful than the double flowers."

Joseph Meehan, in *The Florists' Exchange* recommends the following trees for planting along the seashore.

*Cerasus Serotina*, *Gladitschia*, *Gymnocladus*, *Ginkgo*, *Fraxinus*, *Liquidambar*, *Nyssa*, *Liriodendron*, *Phellodendron*, *Populus*, *Maclura*, *Taxodium*, *Ailanthus*, *Quercus*, *Carya*; and the *Salix*.

E. W. Kirkpatrick sized things up correctly when he stated at the Portland Convention that "Plant diseases and insects are primarily invited as a result of poor and deficient soils."

Let us have more good cultivation, more intelligent honest work on the land and there will be less need for quarantine and inspection.



## Obituary.

### MRS. FREDERICK W. KELSEY

Nurserymen will sympathize with Frederick W. Kelsey in the loss of his wife who died on July 4th at their home, 177 Centre street, Orange, N. J. Mrs. Kelsey was very active in the welfare of the Orange Memorial Hospital and was one of the originators of the idea of forming the Hospital Auxiliary of Young Women. She was also active in the Woman's Exchange and had been a member of the Woman's Club of Orange since 1886. She was chairman of the Club's Playground committee and did much for the movement.

### JULIUS ROEHRS

Many nurserymen will be much grieved to hear of the death of Julius Roehrs, head and founder of the Julius Roehrs Co., Rutherford, N. J., who passed away July 20th in his seventieth year.

Alexander Cummings, Jr., has accepted a position with A. N. Pierson, Inc., Cromwell, Conn. to take charge of a recently inaugurated retail department.

Mr. Cummings was head gardener of the parks at Hartford, Connecticut, and although a young man he leaves behind him a good record of his ability in that city.



## Business Movements.

The Elliott Nursery Company, of Pittsburgh is making good progress in the establishment of its eastern branch at Princeton Junction, but will be a couple of years or so before they can do business from there. The erection of propagating houses, etc., and planting is going on apace.

Mr. Elliott expects to have an investment of \$75,000 before it is in shape to do business.

The German Nursery and Seed Company of Beatrice, Nebraska, has purchased an additional 200 acres on which to grow nursery stock.

Arthur Norton, of Clarkesville, Missouri, has taken into partnership W. E. Thurman. His nursery business will hereafter be known under the name of Norton and Thurman.

The Henk Dirken Floral and Nursery Company, Houston, Texas, has incorporated to conduct an import business. Capital stock is \$20,000. The following are the incorporators: E. P. Daviss, Henk Dirken, E. P. Daviss, Jr., J. L. Russell and A. E. Keisling.

W. L. Killiam, Charlotte, N. C., an aged Catawba nurseryman, on June 24th fell in his nursery, striking his chin. The bone was broken and his head and neck injured. The injury is very painful and Mr. Killiam will be confined for some time, due to his age.

The Prospect Hill Nurseries, Castleton-on-Hudson, N. Y. have filed a certificate of incorporation with the secretary of state. Capital stock \$10,000. The following are the directors: Edwin Bell and Laura A. Bell, of Castleton, and B. H. Mills, of Albany.

### A CACTUS NURSERY

Preparations are being made to start a cactus farm on a large scale in the edge of Fresno County. A wagon train load of cactus leaves, or cuttings, from the C. J. Welch ranch, south of Los Banos, was delivered the first of the week at the Oro Loma ranch of J. H. Wythe. The load comprised more than twenty-five tons of cuttings, and they were delivered by means of the caterpillar engine and outfit. It is stated that another similar load of cuttings will be ready for delivery the latter part of this week.

The cuttings will be set out on the freshly prepared farm of Mr. Wythe, comprising sixty acres of level land. This will then be, it is claimed, the largest spineless cactus nursery in the world. The plants which so far have been set out on the Oro Loma property are said to be thriving, and the Oro Loma tract may be destined to become famed for its production of superior spineless cactus.

## RETAIL PRICES

Some months ago the NATIONAL NURSERYMAN took up the subject of the cost to produce nursery stock. The many replies received from various nurserymen on the subject indicated very clearly that no practical method had yet been discovered for arriving at the cost of their products and that prices were largely set at random.

The large nurseries have to a certain extent attempted to find out and had some idea of what their stock did cost, but many fixed their prices according to the other man's catalogue so that there was a downward tendency in prices all along the line regardless of supply or demand, the prices being set largely for the purpose of getting business.

With perhaps the exception of some of the standard kinds of trees that are generally planted, the public at large has little knowledge of the price of nursery stock. They are just as likely to imagine it is three times the price it can be readily bought for as they are to think it is dear at the price usually asked. Even the nurseryman himself is often at a loss to know what value to place upon his own goods.

A good illustration of the necessity of a better knowledge of values comes to the mind of the writer. Calling at a small ornamental nursery in the east he noticed a few very fine specimens of *Retinispora obtusa nana* asking the price he was informed \$2.50 and could have bought them at that price. A couple of weeks later these same plants were valued at \$15.00, they were worth it too even when figured at the estimated cost of growing them.

In addition to this there actually exists a great range of prices. Anyone who will take the trouble to get a representative list of retail catalogues and analyze them will find the range to be extremely large. What may be offered in one man's catalogue for a dollar very likely is priced in the next at five, for apparently the same kind and grade of stock. Of course, the nurseryman himself can understand the difference but the buying public cannot and naturally lean towards the low priced stock.

Although we have no method of getting at actual cost we do know from the results of our business about what plants cost and that they differ very greatly in value according to the kind and even according to the locality in which they are grown, for instance in some localities a given tree will be scarce and costly to grow while in others it will be plentiful, free growing and cheap.

Anything that will enable the nurseryman to bring uniformity in retail prices and prevent him from either under charging or over charging according to the conditions under which he is doing business will be of benefit.

The following is a suggestive grouping with a base price that can be made to fit the conditions of any nursery retail business.

## SUGGESTED BASIS OF RETAIL PRICES

Single Rate for Transplanted Bushy Stock

Shrubs that propagate very easily and produce saleable plants in very short time. Hard wood cuttings, such as Willows, etc.....	18-24 in. @	\$ .25
	2-3 ft. @	.30
	3-4 ft. @	.35
	4-5 ft. @	.50

Single Rate for Transplanted Bushy Stock

Plants raised from soft wood cuttings, seed, layers fairly common and easy to grow such as Weigelas, Spiraeas, Deutzias and Hydrangeas, etc.....	18-24 in. @	\$ .25
	2-3 ft. @	.35
	3-4 ft. @	.50
	4-5 ft. @	.75
Small growing shrubs, such as Deutzia gracilis, Berberis Thunbergii, Hypericum, etc.....	12-18 in. @	\$ .25
	18-24 in. @	.35
	2-2½ ft. @	.50
	2½-3 ft. @	.75
Choice Hard wooded and evergreen shrubs such as Azaleas, Rhododendrons, Magnolias, Japanese Maples, Osmanthus, Ilex.....	12-18 in. @	\$1.00
	18-24 in. @	1.50
	2-2½ ft. @	2.00
	2½-3 ft. @	2.50
	3-3½ ft. @	3.00
	3½-4 ft. @	3.50
Common, quick-growing Evergreens, such as Arbor Vitae, Norway Spruce, Common Pines.....	50c to 75c per foot	
Choice slow-growing evergreens.....	\$1.00 per foot	
Very slow-growing and rare.....	\$1.50 to \$2.00 per foot	
Quick-growing trees.....	75c per inch	
Medium-growing trees.....	\$1.00 per inch	
Hard Wooded trees, such as Norway Maple, Oriental Plane and common Oaks.....	\$1.25 and \$1.50 per inch, 3 inches and up at \$2.00 per inch.	
Rare trees.....	\$2.00 per inch	
Magnolias and such trees that are sold by height rather than caliper.....	75c per foot	
Have a X grade priced as above XX grade priced one size in advance.		

By a careful study of the above it will be readily seen that this table does not fix a price but only gives a basis of price and it is up to the individual nurseryman to do his own grouping. In other words, if he finds the Norway Maple is a free growing tree with him and a fairly cheap one in his locality he can put it among the medium growing trees at \$1.00 per inch, or even among the quick growing trees at 75c per inch. Likewise it is up to the individual nurseryman to decide for himself what particular shrub, evergreen, or in fact any kind of plants are the most expensive for him to handle and group them accordingly.

## DUSTING UP THE OFFICE

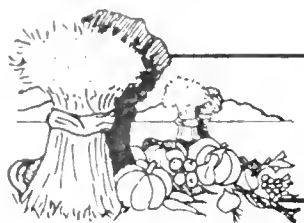
About this time of year we get busy dusting the stationery boxes and shelves, take account and inspect such stock, preparatory to getting ready for new supplies for the coming season. While we are about it we might as well also make a good inspection of the office work in general; revise our plans, improve our system, material and conveniences so as to make the work go more smoothly and facilitate the office handling of our business.

After a careful review of the office work for the past season, we will find no doubt several places where our plans and systems have fallen down and proven inadequate. Here is where we need to strengthen up or maybe our systems are too cumbersome and need pruning; however the case may be, some careful adjusting may be found necessary.

Many follow the same routine year after year without so much as asking themselves if there is a better way; a careful review and study will generally find it. Keep everlastingly on inquiry and alert for the better way, for therein lies a large portion of the service that both holds and draws trade.

G. W. O.





From the U.S.D. & A.

**NOTICE OF QUARANTINE NO. 10,  
with regulations**

**GIPSY MOTH AND BROWN-TAIL MOTH**

The fact has been determined by the Secretary of Agriculture, and notice is hereby given, that two injurious insects, new to and not heretofore widely distributed within and throughout the United States, exist in parts of the following States, to wit: The gipsy moth (*Porthetria dispar*), in the States of Maine, New Hampshire, Massachusetts, and Rhode Island; and the brown-tail moth (*Euproctis chrysorrhæa*), in Maine, Vermont, New Hampshire, Massachusetts, Connecticut, and Rhode Island.

Now, therefore, I, David F. Houston, Secretary of Agriculture, under the authority conferred by section 8 of the act approved August 20, 1912, known as "The Plant Quarantine Act," do hereby quarantine the area hereinafter described as infested by the brown-tail moth and the area hereafter described as infested by the gipsy moth, and, by this Notice of Quarantine No. 10, do order that (1) Coniferous trees such as spruce, fir, hemlock, pine, juniper (cedar) and arbor-vitæ (white cedar), known and described as "Christmas trees," and parts thereof, and decorative plants such as holly and laurel, known and described as "Christmas greens or greenery," and (2) forest plant products, including logs, tan bark, posts, poles, railroad ties, cordwood, and lumber, and field-grown florist's stock, trees, shrubs, vines, cuttings, and other plants and plant products for planting or propagation, excepting fruit pits, seeds of fruit, and ornamental trees and shrubs, field, vegetable, and flower seeds, bedding plants, and other herbaceous plants and roots, shall not be moved or allowed to move interstate from any point in the areas herein quarantined to any point not located in said quarantined areas in manner or method or under conditions other than those prescribed in the rules and regulations hereinafter made and amendments thereto.

The following towns and all the territory between said towns and the Atlantic Ocean are quarantined for the brown-tail moth, namely: Lubec, Perry, Robbinston, Charlotte, Cooper, Plantation XIX, Wesley, Plantations XXXI and XXX, Devereaux, Plantations XXVIII, XXXIII, and XXXII, Milford, Alton, La Grange, Medford, Orneville, Atkinson, Dover, Sangerville, Parkman, Wellington, Brighton, Solon, Embden, New Portland, Freeman, Salem, Phillips, Berlin No. 6, Byron, Andover, N. Surp., and Grafton, *Maine*; Cambridge, Dummer, Stark, and Northumberland, New Hampshire; Guildhall, Granby, Victory, Burke, Sutton, Sheffield, Wheelock, Stannard, Walden, Cabot, Marshfield, Plainfield, Barre, Williamstown, Brookfield, Randolph, Bethel, Stockbridge, Barnard, Pomfret, Woodstock, Reading, Cavendish, Chester, Grafton, Townshend, Newfane, Marlboro, and Halifax, *Vermont*; Colrain, Shelburne, Conway, Williamsburg, Westhampton, Southampton, Westfield, and

Southwick, *Massachusetts*; Suffield, Windsor Locks, Windsor, Bloomfield, West Hartford, Hartford, East Hartford, Manchester, Bolton, Coventry, Windham, Franklin, Bozrah, Norwich, Preston, North Stonington, and Stonington, *Connecticut*.

The following towns and all the territory between said towns and the Atlantic Ocean are quarantined for the gipsy moth, namely: Lincolnville, Belmont, Searsmont, Montville, Knox, Brooks, Unity, Troy, Albion, China, Vassalborough, Augusta, Chelsea, Farmingdale, West Gardiner, Winthrop, Monmouth, Leeds, Turner, Minot, Oxford, Otisfield, Casco, Sebago, Hiram, and Brownfield, *Maine*; Conway, Madison, Tamworth, Sandwich, Thornton, Ellsworth, Rumney, Groton, Alexandria, Danbury, Springfield, Sunapee, Goshen, Washington, Stoddard, Sullivan, Keene, Swanzey, and Winchester, *New Hampshire*; Warwick, Orange, New Salem, Petersham, Barre, New Braintree, Northfield, Spencer, Charlton, Oxford, and Douglas, *Massachusetts*; Burrillville, Glocester, Johnston, Cranston, Warwick North Kingstown, Portsmouth, and Bristol, *Rhode Island*; Somerset, Fall River, and Westport, *Massachusetts*.

The towns of Eden, Mount Desert, Tremont, Surry, Penobscot, Blue Hill, Sedgwick, Deer Isle, Vinal Haven, North Haven, Islesborough, Searsport, Stockton Springs, Frankfort, and Winterport, *Maine*, are also infested and are also quarantined for the gipsy moth.

**GIPSY-MOTH REGULATIONS**

Coniferous trees, such as spruce, fir, hemlock, pine, juniper (cedar), and arbor-vitæ (white cedar), known and described as "Christmas trees," and parts thereof, and decorative plants, of the area quarantined for the gipsy moth, such as holly and laurel, known and described as "Christmas greens or greenery," shall not be moved or allowed to move interstate to points outside the quarantined area.

Forest plant products, including logs, tan bark, posts, poles, railroad ties, cordwood, and lumber, and field-grown florists' stock, trees, shrubs, vines, cuttings, and other plants and plant products for planting or propagation, of the area quarantined for the gipsy moth, excepting fruit pits, seeds of fruit, and ornamental trees and shrubs, field, vegetable, and flower seeds, bedding plants, and other herbaceous plants and roots shall not be moved or allowed to move interstate to any point outside the quarantined area unless and until such plants and plant products have been inspected by the United States Department of Agriculture and pronounced free from the gipsy moth.

**BROWN-TAIL MOTH REGULATIONS**

Deciduous trees or shrubs of the area quarantined for the brown-tail moth, or such parts thereof as bear leaves, including all deciduous field-grown florists' stock, vines, cuttings, grafts, and scions, but excepting forest plant products, such as logs, tan bark, posts, poles, railroad ties, cordwood, and lumber, shall not be moved or allowed to move interstate to points outside the quarantined area unless and until such plants and plant products have been

inspected by the United States Department of Agriculture and pronounced to be free from the brown-tail moth.

#### GENERAL REGULATIONS

(1) Every car, box, bale, or other container of plants and plant products of which inspection is required by these regulations shall be plainly marked with the name and address of the consignor and the name and address of the consignee, and shall bear a certificate showing that the contents have been inspected by the United States Department of Agriculture and found to be free from moth infestation.

(2) Carload and other bulk shipments of plants and plant products for which inspection is required by these regulations shall not be transported or offered for transportation interstate by cars, boats, and other vehicles unless each shipment is accompanied by a certificate showing that the plants and plant products have been inspected by the United States Department of Agriculture and pronounced to be free from moth infestation. The inspection certificates shall accompany the waybills, conductors' manifests, memoranda, or bills of lading pertaining to such shipments made by cars or boats.

(3) Certificates of inspection will issue only for plants and plant products which have been actually inspected by the United States Department of Agriculture, and the use of such certificates in connection with plants and plant products which have not been so inspected is prohibited.

(4) Where inspection and certification are required by these regulations, inspection and certification by an inspector or other agent of the Federal Horticultural Board are meant, and such inspection and certification will be furnished without the payment of fees or charges of any nature.

(5) Plants and plant products of which the interstate movement is prohibited or restricted by these regulations and which are grown outside the areas quarantined for the gipsy moth or the brown-tail moth may be shipped interstate from points within the quarantined areas to points outside the quarantined areas under permit from the Secretary of Agriculture. Permits will issue only for plants and plant products which are not infested with the gipsy moth or brown-tail moth, and transportation companies shall not accept or move interstate from within the quarantined areas such plants and plant products grown outside the quarantined areas unless each shipment is accompanied by a permit issued by the superintendent of moth work<sup>1</sup> at Boston, Mass.

(6) Persons intending to move or allow to be moved interstate plants and plant products for which certificates of inspection or permits are required by these regulations will make application therefor, as far as possible, in advance of the probable date of shipment. Applications should show the nature and quantity of the plants or plant products it is proposed to move, together with their exact location, and, if practicable, the contemplated date of shipment. Applicants for inspection will be required to place the articles to be inspected so that they can be readily examined. If not so placed, inspection will be refused.

<sup>1</sup>Blanks on which to make application for inspection or for permits will be furnished upon request by the United States Department of Agriculture, Bureau of Entomology, 43 Tremont Street, Boston, Mass.

(7) The interstate movement of all classes of plants and plant products entirely within the area quarantined for the gipsy moth and the brown-tail moth will be permitted without restrictions other than those which may be imposed by State officials at points of destination.

On and after August 1, 1913, and until further notice, by virtue of said section 8 of the act of Congress approved August 20, 1912, it shall be unlawful to move in interstate commerce any of the above-described plants or plant products from the areas herein quarantined except in accordance with these regulations and amendments thereto.

This Notice of Quarantine amends and supercedes Notice of Quarantine No. 4, promulgated November 5, 1912, and shall be effective until otherwise ordered.

Done at Washington this 24th day of June, 1913.

Witness my hand and the seal of the United States Department of Agriculture.

DAVID F. HOUSTON,  
*Secretary of Agriculture.*

#### TEN COMMANDMENTS FOR WINDBREAK PLANTERS

WASHINGTON, July 12.—The forest service has devised a dialogue for the use of farmers in the plains regions. These ten commandments are to be displayed as part of the exhibit which the forest service is preparing for an exposition to be held during October at Tulsa, Oklahoma, in connection with the eighth international dry farming congress. The commandments for owners of windbreaks are as follows:

I. Place the windbreak at right angles to the direction of injurious prevailing winds.

II. Devote from one-eighth to one-fifth of the farm to timber. Its protective value more than pays for the ground it occupies, to say nothing of the timber yield.

III. Plant only species suited to windbreak use, to the region and to the locality.

IV. Plant rapid growers for quick results; but underplant with slower growing species, which are usually longer lived and more valuable.

V. Supplement a deciduous windbreak with evergreens to afford protection in winter.

VI. Separate trees by the spacing proper to the species used. The trees should be close enough to produce a dense windbreak and to yield good poles, but should not be so crowded as to produce spindling growth.

VII. Make the windbreak thick from the bottom up, especially on the side toward the wind. This may be done by using species which branch near the ground, by planting outside rows of low-growing trees, by encouraging natural reproduction, and by underplanting.

VIII. Cultivate the plantation thoroughly while it is young.

IX. Do not allow excessive grazing where reproduction is desired.

X. Do not thin your woodlot too heavily or take out the best trees for minor uses. Remember that a timber tract should be improved by use and that each clearing should leave it in better condition than before.

Other exhibits will show the proper locations for windbreaks, suitable species for planting, and the direction of harmful prevailing winds in various regions.

## FORESHADOWED RETIREMENT OF SIR HARRY J. VEITCH

Sir Harry Veitch, now that he has passed the age of three score years and ten, recognizes that he must soon give up some of his more strenuous duties in connection with his firm's nursery business. The approaching expiration of the lease of the Coombe Wood Nursery has provided the opportunity for determining what shall be the fate of the nurseries when Sir Harry can no longer direct their management, and it has been decided to dispose of them by sale, though this may take some little time. Sir Harry has received many

honours, one of the more recent being the knighthood conferred upon him by the King on the occasion of the International Exhibition at Chelsea last year. He has always exhibited the highest qualities, both in business and private life, and he enjoys the confidence and affectionate respect of every horticulturist.—*Journal of Horticulture*.

GLENVIEW, Ill., June 25, 1913.

Your paper is indispensable to the nursery manager, and is always read from cover to cover, all ads included. From it have learned the greater part of the little I have found out about the business.

A. G. G.

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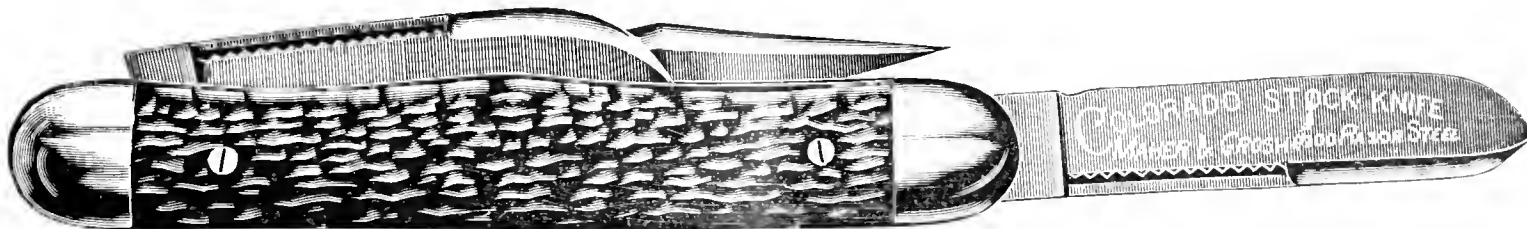


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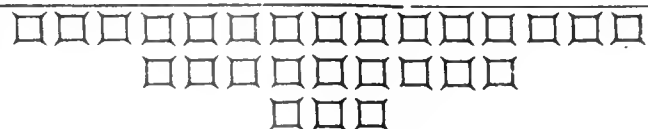
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INCORPORATED 1902

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Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania to whom all correspondence pertaining to the Editorial Department, should be addressed.

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SUBSCRIPTION PRICE \$1.00 per year in advance

FOREIGN SUBSCRIPTIONS \$1.50 per year in advance

ADVERTISING RATES ON APPLICATION

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

218 LIVINGSTON BLDG., ROCHESTER, N. Y.

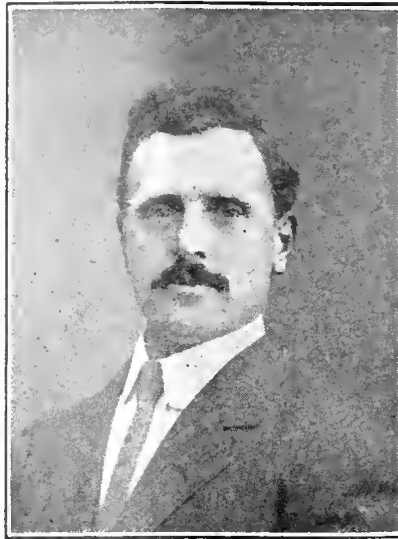
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# VERKADE VAN KLEEF

Nova Nurseries, Waddinxveen, Holland

NEAR BOSKOOP

Nova Waddinxveen  
Cable-Address  
ABC Code 5th Ed.



W. VAN KLEEF, Jr., Proprietor

Nurseries  
at Boskoop and  
Waddinxveen

## ASK FOR MY SILENT SALESMAN

SPECIALTIES: Acer, Ampelopsis, Azalea, Boxwood, Clematis, Climbing Plants, Conifers, Hydrangea, Kalmia, Magnolia, Paeonia, Rhododendron. Roses--dwarf and standard. Shrubs, Young Stock for lining out, Etc., Etc.

WANTED—A Reliable Party for Sales Agency.



### P. D. BERRY, WHOLESALE NURSEYMAN,

is offering for Fall trade 1913

Red, Black, Yellow, and Purple Raspberry Plants; Blackberry; Dewberry; Downing, Pearl, Josselyn, and Houghton Gooseberry Plants, one and two year, No. 1; 150,000 Rhubarb, one and two year, No. 1, whole roots and divided; Horseradish Sets; Gooseberry layer plants of Downing, Pearl, Josselyn, Houghton, and Mt. Seedling. An extra large stock of Blackberry Root Cutting Plants for late fall shipment. Trade list ready Sept. 20th.

No trouble to price your list  
of wants any time by letter.

P. D. BERRY,  
DAYTON OHIO

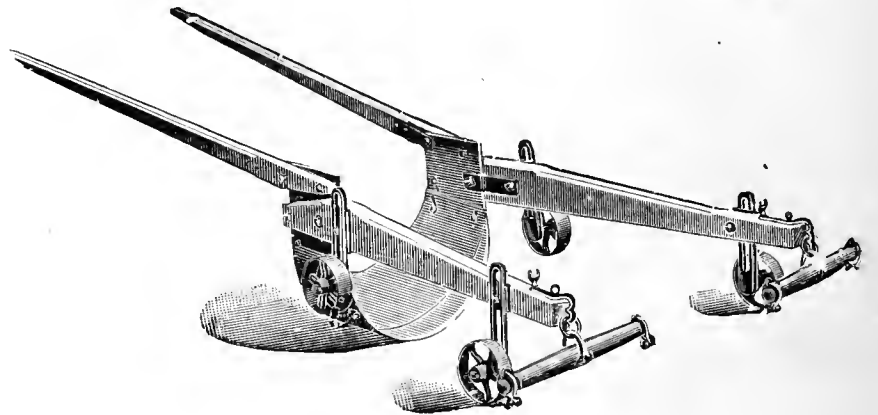
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## BRAGG'S

COMMON SENSE

## TREE DIGGER

Repairs Always on Hand. Send for Catalogue



Digger gets all the roots at the rate of 20 to 40 thousand trees per day, and only needs same power as plow.

L. G. BRAGG & CO.  
Kalamazoo, Mich.

When writing to Advertisers please mention The National Nurseryman



# ORNAMENTAL STOCKS

**NURSERIES**  
**420 ACRES**

## WE GROW

**FRUIT TREE STOCKS—All Sizes.**  
300 varieties of Conifers, 1 to 4 years old.  
1200 varieties of Ornamental Trees and Shrubs, 1 to 3 years old.  
1600 varieties of New and Old Ornamental Trees & Shrubs in all Sizes.  
250 varieties of Climbing Plants.  
400 varieties of Conifers, 1 to 4 feet high.  
400 varieties of Perennials.  
800 varieties of New and Old Roses.

**We Have No Agents.**  
**Write direct to us and**  
**ask for WHOLESALE**  
**CATALOGUES**

TRANSON BROS. & D. DAUVESSE'S NURSERIES,

16 Route d'Olivet

**BARBIER & CO., Successors,**

Orleans, France



## DON'T TAKE OUR WORD FOR IT! TRY IT YOURSELF FOR 10 DAYS WITHOUT DEPOSIT

If not satisfactory, simply return it and no questions asked.

The **Daus' Improved Tip Top Duplicator** is the result of 25 years' experience and to-day is used and endorsed by thousands of business houses and individuals, including prominent Railroad and Steamship Companies, Standard Oil Company, U. S. Steel Corporation, etc.

Our negative rolls now have our new "**Dausco**" Oiled Parchment Back, giving additional strength and efficiency.

**100 copies** from pen-written and **50 copies** from typewritten originals—**Clear, Clean, Perfect.**

Complete Duplicator, cap size,  
Price \$7.50 less special discount of 33 1/3%

**\$5.00**

Felix A. G. Daus Duplicator Co . . . . . Daus Building, 111 John Street, New York

## FOREST TREES FRUIT STOCKS

SHIPMENTS OF OVER 200  
MILLION OF TREES  
ANNUALLY

LARGEST  
**FOREST TREE  
NURSERIES**  
IN EUROPE

Please write for Catalogue and  
Forest Planter's Guide to our  
American Representative:

**OTTO HEINECKEN**

Whitehall Bldg. 17 Battery Place  
NEW YORK



**J. HEINS' SONS**

HALSTENBEK No. 152

Near HAMBURG, GERMANY

## Tree Protection

SCALINE will protect them all seasons of the year.

SCALINE is an oil and sulphur composition, a scalicide, insecticide and fungicide combined—three in one—and it will destroy San Jose, oyster shell, cottony maple, tulip scale, aphid, red spider, thrips, mealy bug and all sap sucking insects.

SCALINE is composed of a high grade petroleum oil and the properties of our fungicide Fungine, thus making it equally effective for the control of various fungi.

SCALINE is used at the strength of one part to twenty parts water for scale; one part to fifty parts for other sap sucking insects. It is readily soluble in water, requires no mixing, and containing no sediment can be applied through the finest spray nozzle.

SCALINE may be used as safely in the growing as in the dormant season. It is an all year round spraying material.

Gallon, \$1.50

Fifty gallons, \$37.50

Ten gallons, \$10

We believe that in SCALINE we have one of the best spraying materials on the market today for general spraying of trees, shrubs and hardy plants. We feel confident that a trial would make you a regular user of this product.

## Aphine Manufacturing Co.

M. C. EBEL, General Manager

Manufacturers of Agricultural Chemicals

MADISON, N. J.

'APHINE'  
Insecticide

"FUNGINE"  
Fungicide

"VERMINE"  
Vermicide

When writing to Advertisers please mention The National Nurseryman

# Ornamental Plantings Increase the Value of Every Home

Of course you will have a strong demand for Ornamentals this fall—every season sees an increase in this class of trade, for a man that owns a home is beginning to realize that ten dollars or a hundred dollars laid out in a well selected planting of ornamental trees and shrubs will be returned a good many times over when he wants to sell his place.

## Are You Getting Your Share of this Trade?

Right in your own town you know places that could be wonderfully improved if the owner would only spend a few dollars. Then there is the man who is just building a house and laying out the ground—maybe not a large place, but he is a prospective customer for trees, and if you have the right kind of stock, at the right price, you can get his order.

We make a specialty of Ornamental Deciduous trees, Shrubs, and Evergreens for the trade. In our nurseries we have thousands of Norway Maples from 5 to 12 feet; Silver

Maples, 5 to 16 feet; Sugar Maples in varying sizes; Oriental Plane and Poplars.

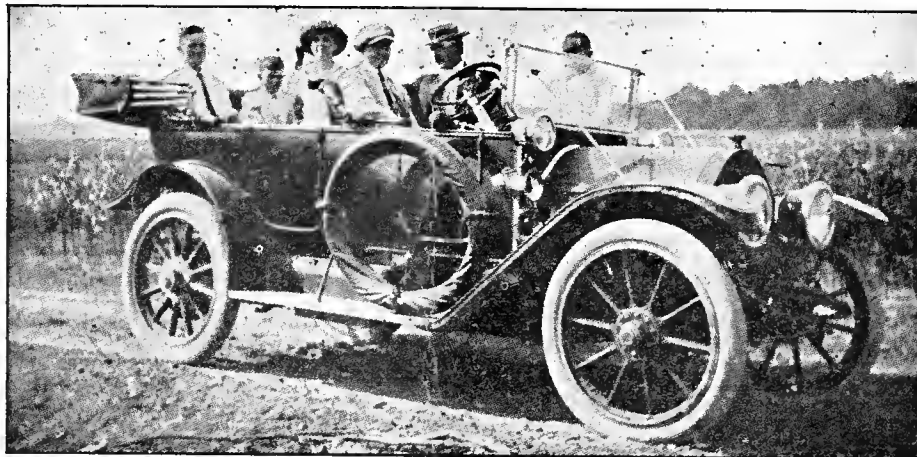
The Evergreens we grow may be counted by the hundred thousand, and we can fill on short notice orders for Koster's Blue Spruce, American Arborvitæ, Colorado Blue Spruce, Norway Spruce, White Pine, as well as many others.

California Privet is grown here by the mile—fact, come and see it. Every plant is strong and rugged, and you can safely recommend it to your most particular customer.

## Come to Berlin and See How We Grow Trees and Shrubs

Plan to visit us during your vacation this year. You will be free from business cares, and you will see many interesting things about our nurseries. Landscape architects who are laying out parks, large estates, or formal gardens, are especially asked to inspect our supply of large deciduous and evergreen trees

that can be planted for quick results. We have the varieties needed for the finest effects. Specimens may be selected now for later delivery—we will care for them until wanted. This is more satisfactory to you than ordering



We will meet you at the station.

by size only, although our order department tries to fill each order with the utmost care.

Berlin is on the "Eastern Shore" of Maryland, seven miles from Ocean City 143 miles from Philadelphia, and 124 miles from Baltimore. Come and see how the soil and salt air make the trees grow, have a "dip" in

the ocean, and a "shore dinner" at seaside hotel. We will pay your hotel bill while you are here.

Write us when you can come, so that we can make our plans to meet you.

## We Grow All the Trees We Sell

You can guarantee anything you buy from Harrison's Nurseries. We stand back of it, whether it is a tree, a shrub, or a plant. We know we are safe, for everything we sell is grown in our own nurseries, by men who know how to produce "the goods."

We offer for fall delivery a splendid lot of Baldwin, Stayman and Yellow Transparent apples in one-year budded trees; York Imperial in one-year and two-year trees. In one-year Peaches, Elberta and Crawford late. Keiffer Pears in both one-year, two-year and three-year trees. We also have a full line of all other varieties, and if you write we will send our new Fall list; or tell us what you are likely to need and let us quote prices.

**Harrison's Nurseries**  
J. G. HARRISON & SONS PROPRIETORS  
BERLIN MARYLAND

Designed and written by The McFarland Publicity Service, Harrisburg, Pa.  
W. F. HUMPHREY, PRINTER, GENEVA, N. Y.



# THE NATIONAL NURSERYMAN



SEPTEMBER, 1913

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

## THE MONROE NURSERY

Established 1847.

OFFER A GENERAL LINE OF

### Choice Nursery Stock

## CHERRY and STD. PEAR

of Extra Fine Quality.

If you are in the market for superior trees write  
us for prices.

**I. E. Ilgenfritz' Sons Co.**  
MONROE, MICH.

## MOUNT ARBOR NURSERIES

E. S. WELCH, Proprietor

**136 Center St., Shenandoah, Iowa**

Make a Specialty of a Complete Line of High Quality Nursery  
Stock for **WHOLESALE TRADE**

**APPLE**—We wish to call your attention to our fine lot of Apple  
for this season's trade. They are the best we have  
ever grown. None better on the market. Let us quote  
your wants in these.

Large stock of **Peach, Plum, Cherry, Currants, Gooseberries,**  
**Blackberries, Root-Cutting Plants.**

**ORNAMENTALS**—Elm, American White; Maple, Silver  
Leaved; Privet, California and Ibota.

**ROSES**—Hybrid Perpetuals, Moss and Ramblers.

**FOREST TREE SEEDLINGS**

**APPLE SEEDLINGS** **APPLE GRAFTS**, made to order

Ask for our Fall Trade List, which will be issued early in Sept.  
Always pleased to quote your wants

## **EVERGREENS** **OUR LEADING SPECIALTY**

**RHODODENDRONS, HEMLOCKS, WHITE  
PINES, BOX BUSH.** A general collection  
of specimen ornamentals.

*ALSO*

**NORWAY MAPLES, PIN OAKS, IBOTA  
PRIVET, SPIRAEA VAN HOUTTEI**  
by the thousand.

**Andorra Nurseries,**  
WM. WARNER HARPER, Prop.  
**CHESTNUT HILL, PHILA., PA.**

## **THE JEWELL NURSERY CO.**

*Wholesale Nurserymen*

**LAKE CITY, MINNESOTA**

Established 1868

1500 Acres

Everything in the line of Nursery Stock  
suited to Northern culture.

*Let us figure with you*



Now is the time to place your orders for  
**Direct Importations**

from European Nursery Centers

**FRENCH FRUIT STOCKS**

Apple, Pear, Myrobolan, Mahaleb, Mazzard Seedlings, Manetti, Multiflora and Quince stocks. Also full line of Ornamentals for lining out, from Vincent Lebreton's Nurseries, Angers. Best packing and grading. December or February shipment from France.

**Boskoop, Holland, Nursery Stock**

Boxwood (pyramids, bushes, standards, ball-shape, etc). Roses, Tree Roses, Rhododendrons, Azaleas, Magnolias, Koster Blue Spruce, Evergreens, Hydrangea P. G., etc., etc., from Schaum & Van Tol, Boskoop.

**DECIDUOUS TREES**

Norway and Schwedler Maples, Tiliacs, Elms, Chestnuts, Oaks, Planes, Thorns, etc., etc., etc., straight stems and good roots, careful selection, best packing from Union Nurseries, Oudenbosch, Holland.

Besides representing the above firms as Sole American Agents, we import to order

**FROM JAPAN AND ENGLAND**

English Manetti, Gooseberries 2 and 3-yr. (Whinham Industry, Whitesmith, etc.), Japanese Nursery Stock and Lilies.

**BAY TREES.** Standards, Pyramids and all shapes from Belgium, Fall or Spring shipment.

**RAFFIA.** Red Star Brand and four other grades; also dyed Raffia in 20 colors.

**WRITE US** for catalogs, special lists, etc., stating the class of stock you are interested in.

**SHIPPING.** We have our own Custom House Dept., with shipping connections at Havre, Hamburg, Rotterdam, Antwerp, Southampton, etc.

**McHutchison & Co.**

17 Murray St.  
New York

The Import  
House

**SIMPSON**

is the name of the men who grow the finest

**CHERRY**

that can be produced by suitable soil, climate and expert knowledge.

Take a look at the stock or ask for a sample and be convinced of the extra quality of their

**TREES**

PEACH

ST. PEAR

APPLE—1 year, 2 year and 3 year  
 AMERICANA PLUM ON PLUM  
 COMPASS CHERRY ON PLUM

**H.M. Simpson & Sons**

VINCENNES, INDIANA

**Griffing Brothers**

**Grow the Better Kind of Trees**

**PECANS,** Budded or Grafted

**PLUMS** on Plum Roots

**PERSIMMONS,** Japanese

**FIGS,** Celestial, Magnolia, Brown Turkey varieties

**SCUPPERNONG, JAMES** and other Muscadine Grapes

**MULBERRIES,** well branched trees, free from Blight

**CAMPHOR** Trees

**CONIFERS** and Evergreen Trees

**PALMS** and Tropical Plants

**SATSUMA** Orange and other Citrus Fruits

Prices are Right

Trees are Right

**Griffing Brothers**

JACKSONVILLE, FLORIDA  
 MIAMI, FLORIDA

MOBILE, ALABAMA  
 PORT ARTHUR, TEXAS

# NURSERYMEN AND FLORISTS

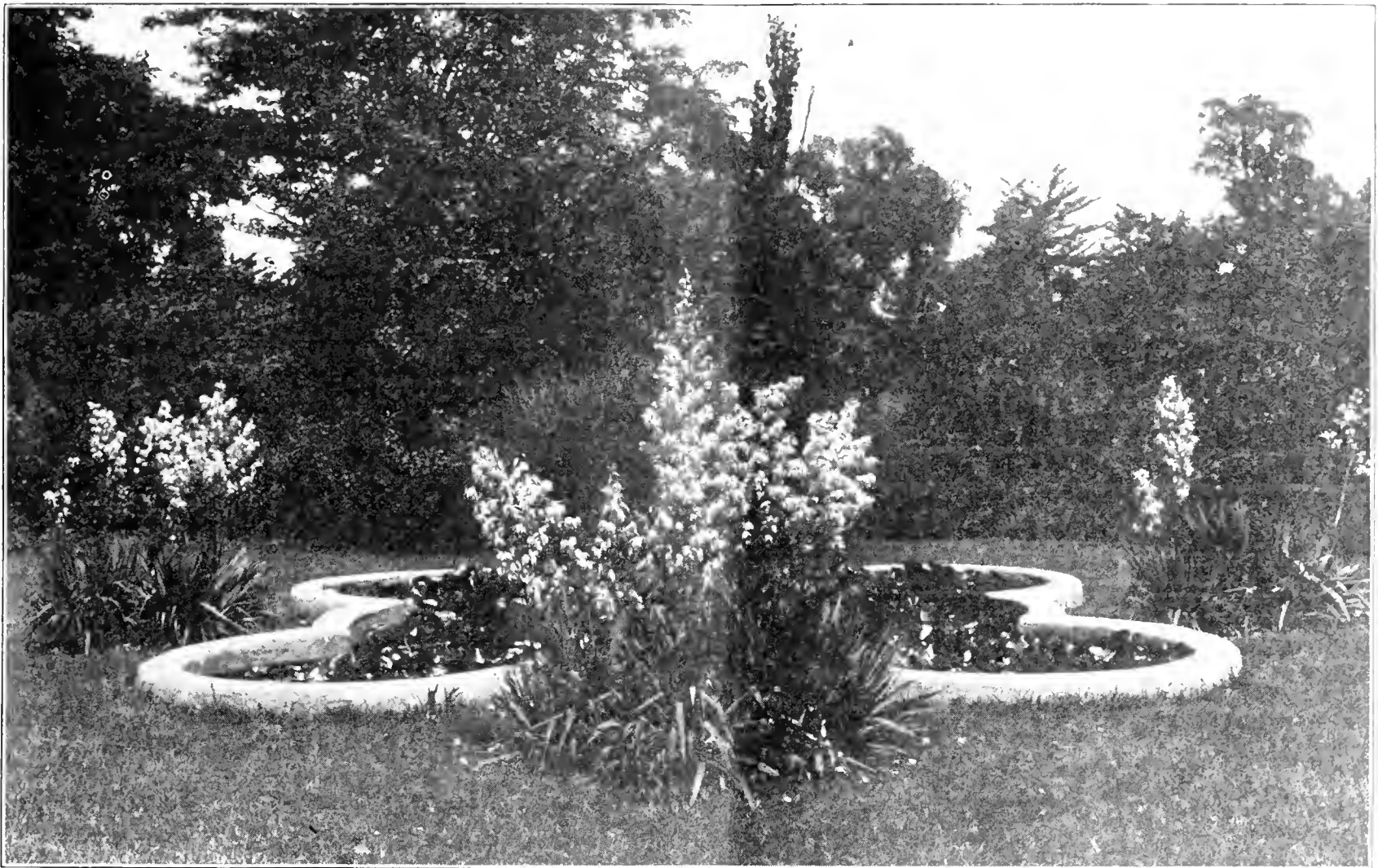
looking for stock can find largest assortment in the United States at the

## Painesville Nurseries

Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses,  
Vines and Plants, Grapes, Gooseberries, Small Fruits, Bulbs, Seeds,  
Palms and other tender Greenhouse Plants

Have large stock stored in frost-proof cellars that can be shipped at any time  
desired; switch from N. Y. C. lines direct into our packing house; can load without  
exposure. Unsurpassed facilities for handling orders large or small.

CATALOGS AND PRICE LISTS FREE



YUCCA FILAMENTOSA

### A FEW SPECIALS WHILE THEY LAST :

STANDARD PEARS in assortment, DUCHESSE DWARF PEARS, BOURGEAT QUINCE,  
PRUNUS PISSARDI and TRILOBA, CUTHBERT and other Raspberries,  
CONCORD and other GRAPES

### OUR SPECIALTIES ARE

Roses, H. P. Moss, Ramblers, Climbers, etc., Peaches, Pears, Plums, Cherries,  
Ornamental Trees and Shrubs in car lots, Weeping Mulberries, Elm and Ash,  
Clematis, Ampelopsis, Paeonies, Hydrangeas, Bush and Tree Perennial Plants.

No Trouble to Price your List of Wants. 59 Years 1200 Acres 44 Greenhouses

**THE STORRS & HARRISON CO.**  
PAINESVILLE, OHIO

TOP NOTCH  
**Barberry Thunbergii**  
**Seedlings**

THE GREAT MONEY MAKER

Place your order early, sure to get the right stock. You want CALIFORNIA PRIVET too. We have over a million in all grades. PEACH TREES by the car load. Please let us quote prices.

**C. R. BURR & COMPANY**  
MANCHESTER, CONN.

**SPECIAL NOTICE**

APPLE QUINCE PEAR CHERRY  
PEACH PLUM

A Fine Block of  
Own Root Roses

ORNAMENTAL TREES SHRUBS  
BERRIES CLEMATIS  
EVERGREENS PEONIES PHLOX  
PYRAMIDAL and STANDARD  
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists and carload lots.

**W. & T. SMITH COMPANY**  
GENEVA, N. Y.

63 Years

700 Acres

**We Are Now Ready**

to quote prices on a fine assortment of  
Select Nursery stock for Delivery Fall  
1913 and Spring 1914

**Apple**—One and two year.  
**Cherry**—Iowa, New York, and Indiana grown.  
**Peach**—One year. Good selection.  
**Pear**—Standard, and Dwarf. Budded on French pear and quince roots.  
**Plum**—Native, European, and Japanese.  
**Currants**—All leading varieties.  
**Grapes**—New York vines.  
**Gooseberries**—Acres of Downing, Houghton, Champion, and Red Jacket.

**SMALL FRUITS, SHADE TREES, and  
ORNAMENTALS**

**Forest Tree Seedlings**—A large supply.  
**Imported Fruit Tree Stocks**—A full line. All grades.  
**Apple Seedlings**—One of our leading specialties.

Let us have your list of wants.  
Will save you money.

**The Shenandoah Nurseries**  
SHENANDOAH, IOWA  
Established 1870 D. S. Lake, Proprietor

**Berckmans' Specimens**

We never call a tree or plant a "specimen" until it really has earned the title. Our evergreens are transplanted, sheared and root-pruned, each one getting just the proper attention to make it a really handsome and serviceable specimen. It costs more to produce such, but it's *worth* it—to us, to you and to your customers.

**Your Trade Will  
Be Pleased With Them**

We offer a select but limited stock at wholesale this year. We call attention to our Biotas—Aurea Nana, Aurea Conspicua, and Japonica Filiformis (see illustration); Retinospora, Thuya, and Juniper—all in popular sizes for the trade.

Our Deciduous Shrubs include Exochorda, Lilac, Spirea, Althaea, Deutzia, Philadelphus, and a very choice stock of Teas' Weeping Mulberry.

Broad-leaved Evergreens—Azalea Indica (Home-grown Plants) Magnolia Fuscata, Aucuba, Ligustrum, and English Laurel. Among our fruits, we direct particular attention to our clean, thrifty Peach Trees, of which we offer the the leading sorts.

**WRITE FOR  
PARTICULARS NOW**

Tell us what you need, quantity, etc., and we will quote lowest price possible. Write early and get the best selections from our stock.

**P. J. Berckmans Co.**  
INCORPORATED  
**Fruitland Nurseries**  
AUGUSTA, GEORGIA  
Established 1856. Over 450 acres in Nursery.

CONIFERS  
BROAD-LEAVED  
EVERGREENS  
DECIDUOUS  
SHRUBS  
WEEPING  
MULBERRY  
PEACHES  
OTHER FRUITS



Biota Japonica Filiformis.



## The Best Tree Digger on Earth



Used and Recommended by Leading  
Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

**Stark Bros. Nursery & Orchards Co.**

LOUISIANA, MO.

We have every facility for growing evergreens from seed—*plus* the finest natural location that we know of in the United States, *plus* over 50 years' practical knowledge of how to do it best. We are now growing millions of them for nurserymen's and dealers' trade, lining out, etc., and you will find

## Hill's Evergreens

the best investment you can make—if you are looking toward permanent results and satisfied customers, as well as the first cost of the trees. We go to a great deal of trouble and expense gathering and sowing our seed, but we think it's worth it all to know that the little trees are true to name, and healthy and vigorous. Our customers, too, have found that it's worth the cost to know that they're getting *reliable* trees when they buy here. If you want the best evergreens you can get for your trade let us tell you more about those of "Hill Quality."

**THE D. HILL NURSERY CO., Inc.**

*Evergreen Specialists*

D. HILL, President Box 401, DUNDEE, ILLINOIS

**L. Spaeth** **BERLIN**  
Baumschulenweg  
GERMANY

## Largest Nurseries in Europe

2000 ACRES

FOUNDED 1720

## HARDY TREES AND SHRUBS

1. Our nurseries lie in a colder climate than the French, Dutch and English nurseries—
2. We grow all the stock we sell—
3. Moderate prices.  
Catalogs free—
4. When in Europe come and see our nurseries—

Have you seen and examined the quality and finish of our

## Rawhide Brand of Shipping Tags and Tree Labels

printed or plain, strung or wired?



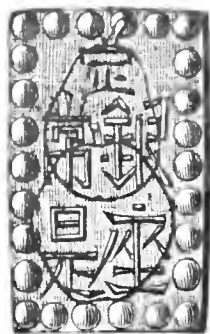
This stock is especially adapted to the most severe usage, being thoroughly waterproof & weather-proof. "Once used, always used."

Send for samples and prices. Our reference are the largest nursery men in the United States.

**The Denney Tag Co.**

WEST CHESTER, PENNSYLVANIA

# Heikes --- Huntsville --- Trees



Huntsville  
Wholesale Nurseries  
Huntsville, Ala.  
JESSIE S. MOSS, Prop.

We offer for Fall of 1913  
in large quantities as usual:

## SPECIALTIES

**APPLES**—Commercial varieties, one and two year, in large supply. As fine in quality as ever grown.  
**PEARS**—Kieffers, one and two years old. A much smaller crop than heretofore.  
**CHERRIES**—On Mazzard. Two year, Bing, Lambert, Napoleon, Black Tartarian.  
**CHERRIES**—On Mahaleb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.  
**PEACHES**—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.  
**ROSES**—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.  
**PRIVET**—Amoor River (South). Retains its foliage longer and holds its color better than California Privet.  
**PECAN SEEDLINGS**—Huntsville grown from selected nuts collected along the Gulf Coast. Thin shell.

See Price List for Particulars.

Address, HUNTSVILLE WHOLESALE NURSERIES  
HUNTSVILLE, ALA.

# Budding Time!

**RAFFIA.** How are you fixed? We can sell you from one to fifty bales and ship same day. We call it the "J&P Preferred" brand—clean, white, wide, long strands,—just what you want for budding; there's too much waste in short Raffia.

**BUDDING KNIVES.** Plenty on hand? Always a good plan to have a few extra ones—the boys will lose 'em, you know.

**FERTILIZER SOWER.** We sell a good one—pays for itself over again every summer—saves material, time and labor. Send for Price List of useful tools and things needed around the nursery.

Jackson & Perkins Co.  
NEWARK, NEW YORK

JUNE 1913

## BOBBINK & ATKINS

World's Choicest Nursery and Greenhouse Products

EVERGREENS and CONIFERS, in several hundred kinds and varieties	PALMS and BAY TREES by the thousands
ROSES, in all kinds and varieties	FRUIT TREES, home-grown, imported, DWARF and TRAINED
RHODODENDRONS, Hardy, ENGLISH HYBRIDS, Maximum and Catawbiense	SMALL FRUITS, in all kinds and varieties
BOXWOOD, in all shapes, forms and sizes	NUT TREES, profitable kinds
HARDY AZALEAS, in all colors and varieties	OLD-FASHIONED, Hardy FLOWERING PLANTS, in thousands of kinds and varieties
HEDGE PLANTS, in all popular kinds	PAEONIAS, IRIS, PHLOX FERNs, and HARDY GRASSES
FLOWERING SHRUBS, in bush and standard forms in hundreds of kinds and varieties	KITCHEN HERBS and ROOTS
SHADE TREES, in hundreds of useful and attractive varieties	RUTHERFORD PARK LAWN GRASS SEED
MAGNOLIAS and other FLOWERING TREES	AUTUMN BULBS, Dutch, French and Japanese kinds
WEeping and STANDARD TREES, in many varieties	Interior and Exterior DECORATIVE PLANTS, in a large variety
JAPANESE MAPLES, in all varieties and colors	PLANT TUBS, in all shapes and sizes. Ask for special list
HARDY TRAILING VINES and CLIMBERS	VISITORS to our nurseries are always welcome
HARDY VINES and CLIMBERS in pots	SEND IN YOUR LISTS FOR QUOTATIONS
SPRING and SUMMER FLOWERING BULBS, ROOTS and PLANTS	

Nurserymen, Florists and Planters  
RUTHERFORD, N. J.

# BRIDGEPORT NURSERIES

OFFER A GENERAL ASSORTMENT  
OF NURSERY STOCK

Apple, Catalpa Speciosa Seedlings  
Shade and Ornamental Trees

IN LARGE QUANTITY

WRITE FOR PRICES

C. M. HOBBS & SONS  
BRIDGEPORT, IND.

## SEEDLING EVERGREENS

BY THE MILLIONS

Arbor Vitae  
Austrian Pine  
Black Hill Spruce  
Colo. Blue Spruce  
Concolor  
Douglas Spruce  
Engelmanii Spruce  
European Larch

Jack Pine  
Norway Spruce  
Pinus Ponderosa  
Pitch Pine  
Red Spruce  
Scotch Pine  
White Pine  
White Spruce

All sizes. Ask for prices.

SPECIAL QUOTATIONS ON LARGE ORDERS

Also the following **APPLES** in 1-2", 5-8" and 11-16" sizes at special prices:

Ben Davis, Duchess, Florence, Gano, Hibernial, Iowa Beauty, N. W. Greening, Okabena, Patten's Greening, Peerless, Peter, Pewaukee, Scott's Winter, Soulard, Strawberry Crab, Transcendent, University, Virginia, Wealthy, Whitney and Wolf River.

## SHERMAN NURSERY COMPANY

CHARLES CITY, IOWA

64TH YEAR

Baltimore Nurseries

## FRANKLIN DAVIS NURSERY COMPANY

Baltimore, Md.



We offer for Fall 1913 and Spring 1914:

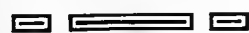
HIGH GRADE STOCK.

General Line:

PEACH, APPLE, PEAR, CHERRY, PLUM, CALIFORNIA PRIVET in 1 and 2 year fine stock.

ORIENTAL PLANES, NORWAY MAPLES, AMERICAN ELMS, SILVER MAPLES, HORSE CHESTNUTS, ETC.

Will make prices right on Peach and Privet in carload lots for early orders.



**SEND US YOUR LIST  
OF WANTS**

## Oriental Planes All Sizes

From 1 $\frac{1}{4}$  to 2 $\frac{1}{2}$  inch Caliper

Double Flowering Peaches  
Double Flowering Japan  
Cherries, Weeping Japan  
Cherries, Flowering Apples  
Asparagus, strong 2 years  
Large and complete assortment of Flowering Shrubs

**Hoopes, Bro. & Thomas Co.**

MAPLE AVENUE NURSERIES  
WEST CHESTER, PA.

PHILADELPHIA

OFFICE:

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We will have our usual supply: Mahaleb Cherry; French, Japan, and Kieffer Pear. Myrobalan Plum. French Crab Apple and Quince Seeds to offer this year. Mazzard Seeds are very scarce. All orders for fruit seeds should be placed early.

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A most complete assortment of Evergreen and Deciduous Tree and Shrub Seeds. All seeds fresh and of good germinating quality. New catalogue ready September 1st.

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Wholesale Nurserymen and Seedsmen

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35TH YEAR

## Pan Handle Nurseries

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Currant	Hydrangea	Catalpa Seedlings
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Our stock is well grown and graded. Prices are such that it will pay to investigate. Come and see us or write.

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WE OFFER FOR FALL 1913:

## Norway Maple Silver Maple and Carolina Poplar

IN CAR LOTS ALL SIZES  
GET OUR PRICES

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GREENBRIER, TENNESSEE

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Nurserymen

Fredonia, N. Y.

GROWERS OF

### Grape Vines, Gooseberries and Currants

One and two years old. Graded up to the highest standard. Our stock for fall of 1913 never looked more promising than now. Write us for catalog. Send us your list of wants. Our prices are right, our stock A No. 1.

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For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

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South Canal St., Dayton, Ohio

## Ornamental Trees, Shrubs, Evergreens, Vines, Etc.

HIGH  
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LARGE  
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Correspondence solicited. Price list upon request.

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## Evergreen Seedlings and Transplants

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"WE RAISE OUR OWN TREES"

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NURSERY AT  
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**Fall, 1913**

**Spring, 1914**

WE OFFER

40,000 Duchess of Oldenburg Apple, 2 and 3-year  
60,000 1 and 2-year Apple in Grimes, Northern Spy,  
Baldwin, Wagner, Yellow Transparent, Maidens  
Blush and Stark. 5,000 2-year Keiffer Pear.

A large portion of the above will run in the heavier grades.  
150,000 Downing and Houghton Gooseberry Layers.  
Standard Grades. Low Prices.

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J. E. STONER, Prop.

We are pleased to offer for Fall 1913

Peach Trees, 1 year, 35 varieties	Apple, 2 year, all grades
Apple, 1 year mostly buds	Cherries, 2 year, general list sour
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Can furnish the above in carload lots or less, also

Grapes, Currants, Gooseberries, Catalpa Speciosa, Carolina Poplar  
Ornamentals in good assortment

**WE WOULD MAKE VERY ATTRACTIVE PRICES ON PEACH  
TREES IN CARLOAD LOTS.**

Please submit list of wants for prices. We have a few N. C. Natural  
Peach Seeds to offer. Crop 1912, also Crop 1913.

When writing to Advertisers please mention The National Nurseryman

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For FALL 1913

Grape Vines, Currants and Gooseberries  
in all varieties and Grades

— also —

Grape and Currant Cuttings and Light  
Grade of Vines for Lining Out  
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## Vincennes Nurseries

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We are pleased to offer for Fall, 1913,

**CHERRY**—Two Year. All leading sour varieties.

**CHERRY**—One Year. General list leading sorts sour and sweets.

**PEACH**—One Year. 30 varieties.

**APPLE**—Two Year. All grades.

**APPLE**—One Year. Cut Backs very strong

**SILVER MAPLE**. All grades.

Can furnish the above in Carload Lots or less. Also Pear,  
Plum, Quince, Compass Cherry, Currants, Gooseberry, Catalpa  
Speciosa and ornamentals in good assortment.

Please submit list of wants for prices. Personal inspection  
invited.

We are now ready to quote lowest prices on

**FRUIT, SHADE AND ORNAMENTAL  
TREES, SHRUBS, EVERGREENS,  
VINES and HERBACEOUS  
PLANTS**

**FOREST TREE SEEDLINGS** we only have in limited supply  
this season, and would advise placing your orders early.

**TREE SEEDS** we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list  
ready end of September.

**The Willadean Nurseries**

SPARTA, KY.

We have a splendid stock of

## Grape Vines

and other small fruit plants for the Nursery  
trade, graded up to the highest standard  
and sure to please you.

Give us a trial order, send in your list now for quotations

**WILLETT & WHELOCK**

North Collins, N. Y.

# The Apple Seedling Situation

The extreme dry weather this season which has broken all records in the past twenty-seven years has almost conquered in the fight with the Apple Seedling growers. But by excessive cultivation we have managed to save a few fields that will make one-third of a stand, but there are many a crest that will not pay to dig. Three months with



no rain! Nineteen consecutive days above one hundred degrees. We are still in the ring, but are being crowded very close to the edge.

## F. W. WATSON & CO.

### Topeka, Kansas

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# The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

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ROCHESTER, N. Y., SEPTEMBER, 1913

No. 9

## THE DISCOVERY OF THE CHESTNUT BARK DISEASE IN CHINA

By DAVID FAIRCHILD, In Charge of Foreign Seed and Plant Introduction, Dept. of Agriculture

Mr. Frank N. Meyer, Agricultural Explorer of the Office of Foreign Seed and Plant introduction of the Department of Agriculture, during his first exploring trip in northern China, 1905-1908, visited the Pang Shan region east of Peking. He reported upon the existence there of con-

among the chestnut trees from which he gathered chestnuts for introduction into this country.

When it was announced that Mr. Meyer would make a second expedition to north China, the question was raised by Drs. Metcalf and Shear, of the Office of Forest Pathology,



Skinner Overhead Irrigation System. One-year Own Root Roses. A Part of the Block not Covered by this System. The Difference in Growth in Favor of Irrigated Portion is Very Marked. Chase Bros. Co., Rochester, N. Y. July, 1913.

siderable quantities of wild chestnuts, where they "grow wild on the slopes of rocky mountains. \* \* \* It is mostly found in groves, growing among rocks and boulders, and even in its wild state it varies considerably in the size and flavor of its nuts and the spininess of the burrs. The Chinese name for the wild form is San li tze,\*" otherwise spelled Shan-li-tze. At the time of Mr. Meyer's exploration in the Pang Shan region, there was comparatively little interest in this country in the chestnut bark disease, and not being a plant pathologist, he did not look for the disease

as to whether or not Meyer might be requested to search for the disease among these Chinese chestnuts. On February 26th, 1913, therefore, at Dr. Shear's request, Mr. Meyer was asked to make a research for the disease, and in order to inform him specifically as to what to look for, specimens of the diseased bark were sent him.

On June 15th, 1913, the American legation cabled the State Department as follows: "Meyer requests the legation to report that he has discovered chestnut bark fungus. Seems identical with American form."

On June 28th a letter was received from Mr. Meyer, written June 4th from a Chinese inn in an old dilapidated town to the northeast of Peking, between Tsun hua toho

\*MEYER, FRANK N. Agricultural Explorations in the Fruit and Nut Orchards of China, Bulletin No. 204, Bureau of Plant Industry, p. 52, March 25, 1911.

and Yehol. In it Mr. Meyer announces the sending of a small fragment of diseased chestnut bark.

San tun ying, Chili Prov., China,  
June 4, 1913.

Mr. David Fairchild,  
Agricultural Explorer in Charge,  
U. S. Department of Agriculture,  
Washington, D. C., U. S. A.

"Dear Mr. Fairchild:

Here I am sitting in a Chinese inn in an old dilapidated town to the northeast of Peking, between Tsun hua toho and Yehol and have been busy for several days collecting specimens of this bad chestnut bark disease and taking photos of same. It seems that this Chinese fungus is apparently the same as the one that kills off the chestnut trees in northeast America. I hope to send a cablegram through the American legation at Peking about this discovery to the Secretary of Agriculture. I am also enclosing a small piece of bark with this fungus on it. More material I hope to send off from Tientsin and Peking. Here are my main observations:

This blight does not by far do as much damage to Chinese chestnut trees as to the American ones.

Not a single tree could be found which had been killed entirely by this disease, although there might have been such trees which had been removed by the ever active and economic Chinese farmers.

Dead limbs, however, were often seen and many a saw wound showed where limbs had been removed.

Young trees and trees on level, poor soil were much more severely attacked than old trees or trees growing on richer, sloping soil at the base of rocks and hills. \* \* \* the wounds on the bigger majority of the trees were in the process of healing over.

The Chinese farmers ascribe this disease to the working of caterpillars, grubs and ants, which are very freely found beneath the bark on these diseased spots on the main trunks and branches.

To combat the disease they scrape the bark clean every winter or early spring. The strips of bark are all collected, tied up in bundles and sold as fuel.

This Chinese chestnut does not grow to such sizes as the American one. Trees over 40 feet are rare. They are of low branching habits with open heads, more or less in the way of European chestnut (*Castanea vesca*).

The lumber is hard but even a good sized tree produces relatively little good lumber.

Old wounds are to be observed here and there on ancient trees.

The maximum age of this Chinese chestnut as seen in its native habitat seems to be between 250 and 300 years, but when that old they are already in decay.

The tree is not a fast grower and does not begin to bear until 12 to 15 years old.

The soil best suited to these chestnuts is a warm, well decomposed granite, with perfect drainage, while as locality they love the lower slopes of hills and mountains, where they are well sheltered.

The valleys and ravines in the lower altitudes of the Rocky Mountain regions would probably supply congenial localities for these chestnuts.

This northern Chinese chestnut is not a lumber tree, but attempts might be made to cross it with the American species, trying to give the last one more hardiness and resistancy against disease.

The nuts of this Chinese chestnut are not as large as those from the European and Japanese forms, but they are very sweet and are in great demand in China.

The great chestnut district of north China lies in the mountain valleys between the town of San tun ying and the great Chinese Wall, 4 to 5 day's journey by earts from Peking to the northeast or 1½ to 2 day's journey by carts from the railroad station Tang Shan on the railroad from Tientsin to Shan hai kwan. Most of the trees seen seem to be original growth, but also plantations have been made at the foot of the mountains and hills." \* \* \*

A subsequent shipment of the diseased material, consisting of bark and diseased branches of the tree, a few mature burrs and nuts, was received July 23, 1913, and on August 11 a number of convincing photographs of the diseased chestnut tree. Full botanical material for identification of this particular species which Mr. Meyer has been asked to get has not yet arrived, and the burrs do not agree with the description of *Castanea mollissima*, Blume. The species collected by Mr. Meyer in the Pang shan region in 1907, which carries our S. P. I. number 21875, has been identified as *Castanea mollissima*, Blume. The region where Mr. Meyer discovered the disease is very close to the locality in the Pang Shan region, where he collected the nuts of *Castanea mollissima* in 1907, but it is impossible at this writing to determine with certainty the identity of this partially resistant Chinese species from San tun ying. This whole question will be discussed in a subsequent paper.

Those better qualified, Messrs. Shear and Stevens, are describing in the current number of *Science* the various steps taken by them in corroborating Meyer's discovery of the presence of the disease in China. It is interesting to note, however, that from the time Meyer cabled, June 13, until the complete link in the chain of evidence of the identity of the Chinese with the American disease, which included the discovery of the characteristic "mycelial fans," the making of cultures which appeared identical, the producing of the disease in American chestnut trees by inoculation from the cultures, and the discovery on July 24 of the ascospores of the fungus, *Endothia parasitica* (Murr.) and on material later sent in only forty-two days had elapsed. When we consider that the little town in the Pang Shan district of China is a day and a half cart journey from a railroad, it is interesting to note the promptness with which exact laboratory research methods in Washington can be brought to bear on a field problem half way round the globe.

[EDITOR'S NOTE—The above article is being published in the current issue of "Science" in company with a scientific paper on "The Chestnut Blight Parasite from China, by C. L. Shear and Neil E. Stevens, Bureau of Plant Industry.]

# IDAHO STATE ASSOCIATION OF NURSERYMEN

E. P. STEPHENS, Nampa, Idaho

The Idaho State Association of Nurserymen met at Payette, Idaho, July 22d. They were made welcome to the beautiful and commodious rooms of the Commercial Club by Mr. Harrader, the secretary.

Mr. Charles T. Hawkes, the president, in his annual address, among other items, discussed the question of the

a tabulated statement made up from the reports of ten of the leading nurserymen of the states of Oregon and Washington. Mr. Brownell estimated that these ten firms produce 90 per cent of the nursery stock grown in the states of Oregon and Washington. The names of these firms are not made public, but their sales for the past year and the



BUDDED ROSES. STORRS & HARRISON CO., PAINESVILLE, OHIO.  
JULY, 1913

shipment into the state in some cases of stock that was not creditable to the shipper. The President also discussed the question of taxation. In 1912 the Attorney General of the state advised the association that under the laws of Idaho then in force, nursery stock was not subject to taxation. Last winter, when the Revenue bill was made up in the Legislature, taxation of nursery stock slipped in, and nursery trees and plants are now subject to taxation. E. F. Stephens of Nampa had in the program been assigned a report of the meeting of the American and Pacific coast associations of nurserymen held at Portland in June. This report called attention to the value and importance of these associations, the formation of acquaintance and friendship, the better understanding of the business and wants of their customers, the sharing of any useful experience, and that unison of purpose and feeling which comes from association. Mention was made of that wonderful public sentiment which in Portland apparently compels every householder to do his part in the planting of roses and shrubs and justifying the designation given Portland of the Rose City. Suggested also that in the present era when commercial planting slackens for a time, increased effort could be made to push the sale of ornamental stock and the home orchard and plantation.

Mr. Albert Brownell of Portland discussed nursery conditions in the northwest. Mr. Brownell held and quoted from

amount of stock growing during this season appeared in carefully tabulated form. To illustrate, of a certain variety of apple a stated number of thousands of trees were sold during the year 1912, which was the best guide they had of the wants of the public for the current year. In some items these statistics showed a larger quantity of stock in process of production than would be indicated as being needed by the purchasing public. These tables gave the number of grafts planted, the number of stocks budded and growing, the number of stocks planted to be budded and so on through the various departments of stock grown. This summary carefully studied enables the nurseryman at this time to remodel his budding list, to increase on varieties most desired, and to cut out or check varieties in less demand. These tables are prepared by the secretary of the association, and are then available to the firms that exchange this information. This concert of action should be very helpful in guarding against ill-considered or over production. Mr. Geo. Fenton, secretary of the Hartley Nursery at Emmett, discussed some of the causes of nursery loss during the season of 1912. The old question 'Should nursery stock be replaced to the planter?' was given to George W. Fonner of Payette.

Anton Diedrickson of Payette devoted his time largely to the growing of ornamental stock, and had something to say on this subject.



Mr. J. F. Litooy, secretary of the association, talked of orchard planting not overdone. East of the mountains only 25 per cent of the trees planted were ever commercially profitable. Under-irrigation perhaps 50 per cent of the trees planted were ultimately productive. Mr. Litooy thought that for two years there would be lessened commercial planting. Within five years we might feel sure that the apple orchardist would have production and distribution so well in hand as to be very profitable and then, largely increased planting. In the judgment of Mr. Litooy, the central sale association will ultimately supervise the growing, grading and packing.

Mr. John U. McPherson, state inspector, urged concerted action that should make the state responsible for the expense of inspecting nursery stock just the same as the state now pays the expense of orchard inspection. He believed that if the attention of the legislature was called to the question, the equity of this method would be apparent. Mr. McPherson stated that whereas two years ago there were one hundred and twenty-three nurserymen there are now only fifty-four. Most of the farmer nurserymen have dropped out. Mr. McPherson also suggested that the records of his department clearly indicated that certain nurseries used Idaho as a dumping ground for nursery stock they would not attempt to sell at home. Mentioned one case where a planter paid cash in advance for 7000 Italian prune trees and succeeded in making only 300 of them to grow. In the judgment of Mr. McPherson, it would be wise for the society to appoint a committee to review the records of this department and take such action as might be considered judicious.

Papers and discussions occupied the morning and the afternoon session. The Payette nurserymen entertained the society at dinner at 7:30 in the evening with social functions following.

### RAMBLING NOTES ON TREE SEEDS

Many kinds of ornamental trees and shrub seed are now ripening up and should be gathered and stored away until the proper time comes for sowing.

In the case of evergreens the majority of them are better sown in the spring but there are one or two kinds such as the *Mahonia aquifolia*, *M. Japonica* and *Cerasus Caroliniana* that are as well sown as soon as ripe. Most of the evergreens sown in the spring come up fairly soon but in some instances like the Junipers they do not germinate until the spring following their sowing.

Among the deciduous trees most of the Maples should be sown as soon as ripe. This also is true of the White Oak, *Quercus alba*. These acorns are very difficult to keep as they start to sprout so very readily. Most of the other acorns can be kept over if properly stored in a cool, dry cellar in sand. They can then be sown the following spring.

Hickory nuts, with the exception of the Pecan nut, *Carya olivaeformis*, should be sown in the fall as soon as ripe.

When the large seeds of trees, like the Beech, *Pyrus* and nut trees, are sown in the fall there is the ever present danger of mice and other vermin eating them so precautions will have to be taken against these pests.

While it is impossible to specify the exact depth to which the seed should be sown, it is a good plan to cover them about the depth of their own diameter, but this, of course, varies according to whether the soil is heavy or light. Nothing but experience will teach how they should be handled.

No attempt should be made to cover very fine seed except by brushing it with the back of a shovel after it has been spread on the ground.

A good cover for seed beds is a sash made out of inch lath. These sash must be close enough to the ground to keep birds away and in the case of evergreens must come off as soon as the seed sprouts or every plant will rot or damp off for want of sunlight. They may be replaced when they are hardened off a little bit but just at the germinating period particular attention must be given.

Very hard shell seeds such as the Locust, Kentucky Coffee, *Celtis* and small seed like asparagus can be hurried along by soaking a few days or even longer in water before sowing.

### JOINT COMMITTEE ON UNIFORM HORTICULTURAL LAWS

ORENCO, Ore., June 30, 1913.

Dear Sir:

A resolution, of which the enclosed is a copy, was passed without a dissenting vote by the joint convention of the American and Pacific Coast Nurserymen, held in Portland, Ore., June 16th to 20th, inclusive. The following standing committee was appointed to take charge of the work: Wm. Pitkin, Rochester, N. Y., Chairman; Peter Youngers, Geneva, Nebraska, Treasurer; M. McDonald, Orenco, Ore.

Immediately following the passing of the resolution, and the appointment of the committee, a subscription list was passed and members subscribed for the amounts set opposite their names, per enclosed copy. It was agreed that this subscription list should be sent out to all nurserymen in the United States immediately, requesting their subscription to be forwarded either to Mr. John Hall, Rochester, N. Y., secretary of the American Association; or Mr. C. A. Tonnison, Tacoma, Wash., secretary of the Pacific Coast Association, who will forward the amount to Mr. Peter Youngers, of Geneva, Nebraska, treasurer of the American Association, who will act as treasurer of the fund.

The committee was appointed only after the most thorough and exhaustive discussion of the subject by members of the joint convention who realized the great need of bringing about harmonious co-operation among the various and diverse horticultural interests of the different states, and looking towards a uniform law that will foster, conserve and protect all of the horticultural interests of the United States.

Realizing that it will take both time and money to bring about this condition, which will require the united action and the support of all the horticultural interests of this country, you are respectfully requested and urged to make a subscription to this fund to the end that this long expected work may be carried to a successful finish, under the auspices of the two great nursery associations of the United States.

Just at the close of the Portland convention the writer was requested to send out this appeal to all nurserymen in

advance of the meeting and organization of the committee, so that the funds may be available at the earliest possible moment. If a member of the American Association, send your contribution to Mr. John Hall, Rochester, N. Y., secretary; and if a member of the Pacific Coast Association, send your subscription to C. A. Tonneson, Tacoma, Wash., secretary. If a member of both associations, choose for yourself to which secretary you will send your subscription. You will observe that the limit is set at \$25. You can subscribe any amount under \$25 that you choose, it being understood that no one is asked to subscribe more than they can afford up to \$25, showing your sympathy and good will in this great work.

You can fill out the enclosed blank for the amount that you wish to subscribe and mail to the writer, when it will be forwarded to the secretary of the respective association through which you wish it to go, or you can mail direct to the secretary, as you choose.

This is important. Do not lay it aside until you have filled out the blank and mailed it, whether your subscription be large or small. **DO IT NOW!**

Yours truly,

M McDONALD.

### THE ORNAMENTAL GROWERS ASSOCIATION

There was a strong gathering of the Ornamental Growers Association at the Hotel Walton, Philadelphia, Pa., on August 5, 6, and 7th. Representatives were there from many states.

Theo. J. Smith, Geneva N. Y., was elected president and Charles J. Maloy, Rochester, N. Y., secretary.

The mornings were devoted to business matters pertaining to the Association and the afternoons to visiting nurseries and places of interest in the vicinity of Philadelphia.

Wednesday afternoon a visit was made to the William H. Moon Company, at Morrisville, Pa., where they were entertained and shown over the nurseries.

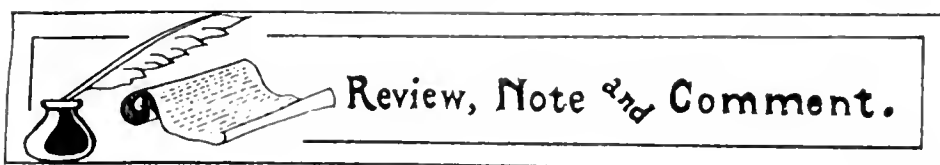
Thursday afternoon they visited West Chester and were the guests of the Morris Nursery Company, and Hoopes Brothers & Thomas Company.

Friday the members took an automobile ride to the nurseries of Thomas Meehan & Sons, Dresher, Pa., where a luncheon was prepared for them in the packing shed. From there they went to the Andorra nurseries at Chestnut Hill, Pa., and again partook of a repast on the nursery grounds.

The delegates of the meeting were very much surprised and interested by the great amount of ornamental and fruit trees grown on the nurseries in the vicinity of Philadelphia and were delighted by the manner in which the Pennsylvania nurserymen showered attentions on them. It was an extremely enjoyable meeting all through and one which will be long remembered.

### NOTICE TO GROWERS OF GOOD STOCK

Advertisers and subscribers having a good block of nursery stock or choice individual trees or plants should send us a photograph of them. We shall be glad to illustrate them in THE NATIONAL NURSERYMAN.



The Indiana Horticultural Society met August 21 and 22 at Centerville in honor of E. Y. Teas, of that place who is the only living charter member and who recently retired from the nursery business.

The firm known as the Old Colony Nurseries of Plymouth, Mass., established in 1840, has been reorganized and incorporated with Thomas R. Watson, president, and John W. Leonard, Jr., treasurer and manager, continuing in the same hands.

At the State Nurserymen's Convention at Payette, Idaho, the following officers were elected: President, Anton Diedrichsen, of Payette; vice-president, George Fenton, of Emmett; secretary, J. F. Littooy, of Boise.

Gray's Nurseries of Salem, Ind., report that the severe drouth that had extended over a great part of the country has not injured the growth of nursery stock there. In fact they have the finest growth they have ever seen.

Pencil manufacturers are buying up old red cedar fence rails in Tennessee and southward, to be made into lead pencils.

### NEW ZEALAND NURSERYMEN

According to reports of the Annual Conference of New Zealand Nurserymen which have just come to hand conditions there are much the same as in the United States. Crown Gall, Inspection, Grading of Fruit Trees are among their problems.

An unusually interesting demonstration of the value of dynamite in stopping a forest fire was made by the Dupont Powder Company at a summer meeting of the Eastern Foresters Association on the College Forest of the New York State College of Forestry at Wanakena, N. Y. For many years it has been a problem how to stop, in an effective and rapid way, the ground fires, which have done so much damage in the Adirondacks. Over large areas in the Adirondacks and Catskills the mineral soil is covered, often several feet deep, with a duff or peat which will often hold a smouldering fire for many weeks and sometimes months. A sharp fire was set by the students of the State Ranger School and in front of this advancing fire was placed a string of dynamite cartridges, which as the fire reached the line were exploded and the fire was halted as effectively as if it had reached a stream of water. The dynamite threw up vast quantities of loose soil, leaving a ditch several feet deep. A fire smouldering in heavy soil would be stopped absolutely by such a ditch and the loose material thrown up could be used to advantage as a smother for any fire that might be left burning on the ground over which the surface fire had passed. This demonstration proved that at a cost of from \$10.00 to \$15.00 a ditch could be formed, that would stop an

ordinary sub-surface fire and that placing the dynamite would not take more than twenty minutes to half an hour. Without the use of some explosive it might take several men several days to check the fire by the construction of such a ditch.

The Jewell Nursery Company, Lake City, Minn., has issued a booklet of 32 pages entitled "Practical Hints and Helps for Salesmen." It is evidently intended to distribute among their many agents.

As it says in the introduction "the book is presented for the sole object in view to be of some service to some poor benighted salesman who may have fallen into the slough of despond or who may have become discouraged and can find no way out."

In addition to the strong advice and the knowledge given it also very tersely outlines their business ideals and policy and appears to be a splendid method for developing the necessary *esprit de corps*.

Bay State Nurseries, North Abington, Mass., has issued their wholesale price list on evergreens. By the looks of the list they must have a big stock of fine trees. The list is very complete, carrying many choice kinds in good sizes. The list of Pines is especially strong and evidently in big quantity.

A distinct looking catalogue devoted exclusively to nuts has come to hand from Vincennes Nurseries, Vincennes, Ind.

W. C. Reed the proprietor is evidently specializing upon hardy northern pecan nuts.

The catalogue is liberally illustrated with new, attractive cuts, and ought to be a business getter.

Mr. M. B. Farquharson, of the Elm City Nursery Company, New Haven, Conn., is spending his vacation traveling and visiting nurseries. He says he is thoroughly enjoying his trip and gaining much valuable information.

The Elm City Nursery Company, New Haven, Conn., is sending out an attractive pamphlet-circular advocating fall planting. It gives lists of evergreens, fruits, deciduous trees, flowering shrubs; vines and herbaceous plants they recommend for fall planting. The spring planting season is entirely too short and all retail nurserymen should do their utmost to extend the planting season. Nearly any season is better than eleventh hour spring planting and it is up to the nurseryman to make the fact known and endeavor to overcome the inertia so prevalent among planters as this time of the year.

Professor L. H. Bailey's connection with Cornell University terminated July 31, 1913. For the next year or so he will be busily engaged on the new Cyclopedia of Horticulture, doing the work at his residence at Ithaca, N. Y.

G. M. Bentley, State Entomologist and Plant Pathologist, Knoxville, Tenn., writes:

The nursery inspection work in this State is about one-third finished, there being in all 381 nurseries in the state.

The conditions in the nurseries thus far have been exceedingly good both from the standpoint of growth and the absence of injurious insect pests and plant diseases. Thus far there has been added some 10 new nurseries to the list and many of the old firms have increased their acreage. The State Nurserymen's Association has meant much to the nursery interests in this state. Annually the nurserymen and fruit growers hold a two days' convention in Nashville. Already about two-thirds of the nurserymen of the state are members of the association. The chief object of the association is to get the nurserymen acquainted among themselves and to bring about coöperation between the orchardists and nurserymen and in every way elevate the nursery and orchard business.

Wick Hathaway, Madison, Ohio, writes: I have the finest stock of thrifty plants I ever grew — my Everbearing Red Raspberry, producing ripe fruit from June to November. It is bound to become the most popular and profitable variety of the future.

Willis Nurseries, Ottawa, Kansas, report that on account of the hot dry weather their apples will not make up so they will have little in apples to offer but will have a nice lot of stock of the following: Peach, Cherry, Plum, Shade Trees, Forest Seedlings and Apple Seedlings.

Franklin Davis Nursery Co., Baltimore, Md., writes:

"The growing season has been all that we could expect. In the early part of the season we had considerable drouth, but with thorough cultivation stock seems to be growing well, and after the recent rains of a few weeks back stock is looking fine, especially Apple, Peach, Kieffer Pear, Asparagus, etc.

"Referring to your inquiry about prices, from present indications, and some few trade lists and circulars which we see there seems to be a desire or inclination to make prices very low, and this we are indeed very sorry to see. We think it is much better to sell half of your productions at a good, fair price, and put your surplus on the brush pile rather than sell at less than cost of production. There is no reason for such cut-throat and bargain prices, and we sincerely hope that the better class of nurserymen will continue to keep prices as high as possible."

#### ASSOCIATION OF AMERICAN CEMETERY SUPERINTENDENTS

Twenty-seventh annual convention will be held at Buffalo, N. Y., September 17-19, 1913. H. M. Turner, St. Paul, Minn., president; Bellett Lawson, Jr., River Grove, Ill., secretary-treasurer.

#### AMERICAN ASSOCIATION OF PARK SUPERINTENDENTS

The annual meeting was held at Denver, Colo., August 25-27, 1913. James B. Shea, Boston, Mass., president; J. J. Levison, Brooklyn, N. Y., Secretary-treasurer.



## SELLING NURSERY STOCK

It is a pretty good rule for any nursery business to put the selling end of the business in the front, and give it more serious consideration than the production.

Too often the young nurseryman devotes all his energy in growing, expecting his market to come to him. It is true that A No. 1 stock will almost sell itself if there is any market at all and it is also true that demand rarely exists of itself except for necessities. We all know that our forefathers did not desire, or even hear of many things that we now consider as necessities.

The florist business is a good illustration of this. The enormous trade in cut flowers has practically all come within the last 30 years or less, and it is due largely to the florists themselves catering to the innate love of flowers existing in everyone. The nurseryman has a larger field of possible development. When one thinks of the orchards, farms and homes throughout this broad land of ours, there is no limit to the market. The main question is how shall it be developed?

The principle methods at present are—through the medium of the landscape gardener, catalogues and booklets, magazine and other advertising and the nursery salesman. Many nurseries have landscape gardeners as a department of their business and make plans free if the size of the prospect warrants it. Competition along this line is likely to lead to a condition of things not altogether desirable. Plans cost money and the nurseryman should be pretty sure of his order before going to the expense of having plans made.

If opportunity occurred, many customers would not hesitate to ask for competitive plans from different nurserymen without thinking or caring about the cost as long as he did not have to pay the bill.

It should be a fixed policy that the customer pay for the plan, and for the larger places it is better for all concerned if the client pays for professional landscape services independent of the purchase of stock.

There are, however, thousands of small places up to about an acre in size where the owner could not be induced to engage the landscape gardener as separate from the purchase of stock and in such instances it is up to the nurseryman to sell him stock including information in some shape or other showing how to arrange it.

The nurseryman's catalogue is another way of reaching his market and perhaps the one most generally depended upon.

To issue a bi-annual catalogue of any size, is a costly operation and unsupported with a good up-to-date mailing list and systematic follow-up, is unlikely to prove very profitable.

Magazine and other advertising rarely brings direct results, yet the nurseryman who does not advertise will soon find he is a back number with a failing business.

Personal contact with the customers through the medium of a salesman seems to be the most promising field of effort. The good salesman not only sells stock, but develops a market and builds business. The tree agent has done

good work in popularizing plants in spite of the adverse criticism which has been heaped upon him, but the time has come when good men have to be sent after the business, who know plants and can tell the customer, what, where and how to plant.

A salesman whose periodical visit to a locality would be looked forward to with interest by those who are interested in their gardens and grounds.

Such a man, although perhaps expensive could hardly fail to make good with a responsible house back of him.

The nursery salesman may not have an exclusive line but he has one that has the greatest possible interest to many people. Goods for which, if he has selling ability, it is possible to create a desire to the limits of the customer's pocket book.

A sale to be a good one must benefit the buyers as well as the sellers so that it is essential to sell plants that are suitable for the purpose or situation for which they are required. They must be delivered at the proper time and in good shape, so that perfect coöperation between the salesman and the nursery, is very essential. It is at this point that the tree agent often falls down which has brought him in such bad repute.

Competition is keen and often unnecessarily lowers prices, mainly however, through lack of standardization of nursery products, but there is no line of merchandise that the buyer has to take more on faith in the integrity of the seller and no merchandise for which proper handling and service is so essential. Under these conditions it is a poor salesman that has to cut prices to obtain an order.

## EXPRESS CHANGES NAMED

The Interstate Commerce Commission ordered reductions in express rates today, which will cost the companies fully \$26,000,000 a year. The new rates become effective on or before October 15. The total reductions aggregate about 16 per cent of the gross revenue of the express companies. The report was made after an investigation covering a year. It gives a table of 650,000 rates as a basis for a rate charge to every place in the United States and its possessions.

The United States under the commission's plan is divided into a block system, rates being fixed upon a determined basis for mileage and weight. Rates and charges are classified and the location of each station by block number is fixed. Rules governing the delivery and "pickup" service have been revised and modified, as has been the requirement that each package shall have a label. In case of the shipment of perishable property, consisting of two or more packages, the commission decided that the label need be attached to only one package.

BRIDGER, Montana, Aug. 5, 1913.

Enclosed find Post Office order for \$1.00 in payment of NATIONAL NURSERYMAN.

It is like getting a letter from home. We could not do without it.

Yours truly,

JAMES P. CALLAHAN.

# The National Nurseryman

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Editor ..... ERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in Nursery Stocks of all kinds. It circulates throughout the United States, Canada and Europe.

Official Journal of American Association of Nurserymen

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

## SUBSCRIPTION RATES

One year, in advance.....	\$1.00
Six months .....	.75
Foreign Subscriptions, in advance.....	1.50
Six months .....	1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Rochester, N. Y.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Address, Editor, Flourtown, Pa.

Entered in the Post Office at Rochester, N. Y., as second-class matter.

ROCHESTER, N. Y., SEPTEMBER, 1913.

## AMERICAN ASSOCIATION OF NURSERYMEN

PRESIDENT—J. B. Pilkington, Portland, Ore.; Vice-President, Henry B. Chase, Huntsville, Ala.; Secretary, John Hall, Rochester, N. Y.; Treasurer, Peter Youngers, Geneva, Neb.

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TARIFF—Irving Rouse, Rochester, N. Y.

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LEGISLATION WEST OF MISSISSIPPI RIVER—Peter Youngers, Geneva, Neb.

CO-OPERATION WITH ENTOMOLOGISTS—L. A. Berckmans, Augusta, Ga.

PROGRAM—Samuel Miller, Milton, Oregon.

EXHIBITS—F. W. Power, Orenco, Oregon.

ARRANGEMENTS—John Hall, Rochester, N. Y.; J. B. Pilkington, Portland, Ore.

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MEMBERSHIP—James McHutchison, New York City.

## STATE AND DISTRICT ASSOCIATIONS.

American Nurserymen's Protective Association—President, Henry B. Chase, Huntsville, Ala.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.

American Retail Nurserymen's Protective Association—President, H. W. Marshall, Arlington, Nebraska; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.

Association of Oklahoma Nurserymen—President, J. A. Lopeman, Enid, Oklahoma; secretary, C. E. Garee, Noble, Oklahoma.

California Association of Nurserymen—President, Frank H. Wilson, Fresno, Cal.; Secretary, H. W. Kruckeberg, Los Angeles, Cal.

Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.

Connecticut Nurserymen's Association—President T. E. Burroughs, Deep River, Conn.; secretary, F. L. Thomas, Manchester, Conn.

Eastern Association of Nurserymen—President, Wm. C. Barry, Rochester, N. Y.; secretary-treasurer, William Pitkin, Rochester, N. Y. Meets annually in January.

Idaho Nurserymen's Association—President, Anton Diedricksen, Payette, Idaho; secretary, J. F. Litooy, Boise, Idaho.

Mississippi Nurserymen's Association—President, J. R. Woodham, Newton; Vice-President, W. A. Woods, Tomnolen; Sec'y-Treas., R. W. Harned, Agr. College.

National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.

Ohio Nurserymen's Association—President, W. N. Scarff, New Carlisle, O.; secretary, W. B. Cole, Painesville, O.

Oregon—Washington Association of Nurserymen—President, C. F. Breilhaupt, Richland, Wash.; secretary, C. A. Tonneson, Tacoma, Wash.

Pacific Coast Association of Nurserymen—President, Richard Layritz, Victoria, B. C.; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Meets annually in June.

Pennsylvania Nurserymen's Association—President, Abner Hoopes, West Chester, Pa.; secretary, Henry T. Moon, Morrisville, Pa.

Southern Nurserymen's Association—President, W. A. Easterly, Cleveland, Tenn.; secretary-treasurer, A. I. Smith, Knoxville, Tenn.

Tennessee Nurserymen's Association—President, Chas. Pennington, Rutherford, Tenn.; secretary, G. M. Bentley, Knoxville, Tenn.

Texas Nurserymen's Association—President, C. K. Phillips, Rockdale, Texas; secretary-treasurer, J. M. Ramsey, Austin, Texas.

Western Association of Nurserymen—President, Frank A. Weber, Nursery, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

## UNIFORM HORTICULTURAL LAWS

The appointment of a standing committee to bring about harmonious coöperation among the various and diverse horticultural interests of the different states, is one of the most important moves that ever has been made by nursery interests.

It was a happy chance that made it possible for such a movement to be launched and have the endorsement of both the American and Pacific Coast Associations, but this is not enough it should have the earnest support of every individual nurseryman, for it means much to all engaged in the business.

So far about \$856.00 has been pledged to be paid within 30 days. This we believe mostly by those who attended the convention. There are still thousands to be heard from as every nurseryman is vitally interested and to be effective all must do their share and work for the common good.

## VACATION DREAMS

During the summer months even the most practical nurseryman may be excused for dreaming a little and letting his mind wander off in the future.

There is not much time for this kind of thing during the shipping and planting season, but when attending conventions or maybe traveling for business or pleasure it is not a bad thing to build a few castles in the air and incidentally lay out the grounds and orchards.

All things exist in thought before they become a reality. The thoughtful nurseryman will get inspiration by measuring up his own business against that of others. In comparing the progress made by the nursery business in the last twenty years with that of other lines it seems away behind in the procession. The improvements and progress have not been great. Commercial architecture shows us a Woolworth building, marine architecture an "Imperator." There are flying machines and talking machines, machinery that can do almost anything but think. Even in comparing with allied trades, that of the agriculturist, florist and seedsman, he feels a little behind. It is true there are fine orchards and perhaps the fruit tree grower and orchardist is ahead of the grower and distributor of ornamentals in methods and management.

There are nice parks, cemeteries and gardens, but not what there should be. It is not, however, a masterpiece that marks progress so much as general interest and improvement.

The traveler looks out of the train window and sees thousands of homes that would be benefitted by the planting of a few trees and shrubs but he seldom or never sees a sign telling him where they are procured. The seedsman's sign is there and so is every other product. The florist has his shop in the haunts of men and is well known but the nurseryman is necessarily off in the country, often difficult of access.

The one great problem confronting the nurseryman at the time is that of bringing his goods before the public, not the public who is already interested but that host who do not know anything about him or his goods. The seedsman has succeeded but the nurseryman has not. The time is

ripe for a Napoleon or an up-to-date concern that will cater to the mass and reach him with modern methods.

The tree agent method is perhaps the most effective but it is old-fashioned, cumbersome and costly.

The department stores have tried to help but they are not suited and their handing out "embalmed stock" is detrimental rather than otherwise.

It should be made possible for every householder to purchase trees, shrubs and plants for his grounds as easily as he can furniture for his home. Who is going to show the way?

#### AN INTERESTING NOTE FROM W. C. REED, VINCENNES, IND.

Have just returned from a 300 mile automobile trip over the southern part of Indiana and Illinois. Was accompanied by Mr. C. A. Reed of Washington, D. C., from the Department of Agriculture who is in charge of field investigations in Nut Culture, also Mr. J. F. Jones of Willow Street, Pa., and Mason J. Niblick and my son, M. P. Reed. We were visiting the native Pecan trees that we are propagating from, Mr. Jones located one Pecan tree that measures 18 feet in circumference, 5 feet from the ground and perhaps 195 feet high. Mr. R. L. McCoy of Lake, Ind., and Mr. Wilkinson of Rockport accompanied us part of the time. Had a very pleasant trip.

#### AN INTERESTING MUSEUM

The College of Forestry at Syracuse, in developing a very complete Forest Museum, is developing a collection of tree seeds and a herbarium of specimens of all the native trees. Besides specimens showing fruit and seed and the trunks of the various forest trees, there will be collections of instruments such as saws, axes and logging tools used by the lumbermen and the Forester in the utilization and improvement of the forest. The College is especially anxious to have specimens of old styles of saws and axes used in the forests and all equipment used in the manufacture of maple sugar, tan bark, etc.

#### GOOD CROP OF PECAN TREES

This is our seventh year in the nursery business at Monticello, Fla. Each year we have made good crops of pecan trees but this summer have by far the finest lot of trees we have ever grown. The season has been favorable to tree growth and our pecan trees are certainly extra fine.

We now have growing in our nurseries about a quarter of a million of budded and grafted pecan trees, half of which will be of salable size this fall. We also grow a large number of Satsuma orange trees and some grape fruit.

The demand for grafted pecan trees seems unlimited and we expect to easily sell our entire output before the season is over.

There will be fewer pecans budded here this summer than usual and probably not over half the usual grafting next winter.

SIMPSON NURSERY COMPANY.



## Obituary.

#### CHARLES M. HOOKER

The death of Charles M. Hooker occurred Monday afternoon in Brighton at the home. Mr. Hooker was one of the foremost figures in horticulture in Western New York for sixty years.

When a young man Mr. Hooker entered the employ of Bissell & Hooker, nurserymen in East avenue. On reaching the age of 21 he became a member of the firm of Hooker, Farley & Company in St. Paul street, his father being the senior partner. In 1856 the business was removed to Clover street, Brighton, and the farm of the late Roswell Hart was purchased. Subsequently the father retired, but the business was continued for some time under the old firm name. Afterward the name became H. E. Hooker & Brother. In 1877 the partnership was dissolved. Later C. M. Hooker entered into partnership with his sons, the firm name now being C. W. Hooker & Sons.



CHARLES M. HOOKER

#### PAUL KASE

The body of Paul Kase, president of William Hagemann & Co., importers and exporters of 30 Church street, was found in a stateroom of the Massachusetts of the Eastern Steamship Company when the boat docked at Pier 18, New York. Kase had shot himself through the heart with a revolver which was found by his side. Financial troubles are supposed to be responsible for the act.

The body was identified by Mrs. Kase, his wife, who lives in Bloomfield, N. J. Two letters were also found, one addressed to Mrs. Kase and the other to Miss M. Schulze, an employee in the Hagemann offices.

Kase boarded the Massachusetts at Boston, taking stateroom 47. The body was discovered by porters going through the boat, after she had been at her pier here for two hours. None of the passengers reported having heard the shot.

In figuring results obtained from last year's advertising we find that your space produced 75 per cent more business than any other medium used. Wishing you the greatest success.

GRAY'S NURSERY,

Salem, Ind.

Alvia G. Gray, Manager.



### LINDENS AT THE ARNOLD ARBORETUM

The largest genus of summer-flowering trees here is *Tilia*, the Lindens, which are now (July) at the height of their flowering time although the flowers of a few of the species are already fading and those of some others are just opening. The genus is widely and generally distributed in all the temperate parts of the northern hemisphere with the exception of western North America and the Himalayas. Between forty and fifty species and several hybrids are recognized, for hybrids and supposed hybrids in *Tilia* are common, and among these hybrids are some of the handsomest and most rapid-growing of all Lindens. Although Lindens are much planted for the embellishment of parks and as street trees there is great confusion, especially in the United States, in regard to the different forms which are cultivated, and this confusion in so far as it relates to the European species was imported from Europe with the trees, for Linnaeus and many botanists after him believed that the Lindens of northern and western Europe were only forms of one tree, and so started the trouble.

In eastern North America there are seven species of Linden trees; four of these are from the extreme south and either are not hardy in the Arboretum or have been tried here during such a short time that they need not now be considered. The Linden of the north, *T. americana*, is a splendid great tree growing to its largest size on rich hill-sides and moist bottom-lands, and showing its greatest beauty in the forests of New Brunswick, northern New England and the valley of the St. Lawrence River. This tree may be easily distinguished from the other Lindens by the green and shining lower surface of the leaves which has no hairy covering with the exception of rather conspicuous tufts in the axils of the principal veins. This tree has been somewhat planted in eastern Massachusetts but less frequently than in the neighborhood of more northern cities. Here, especially in dry summers, the leaves are sometimes made brown by the red spider which, however, is easily controlled by spraying. *Tilia spectabilis*, which is believed to be a hybrid between this tree and *Tilia tomentosa* of eastern Europe, is a very vigorous and fast-growing tree of much promise. In some European nurseries it is sold under the name of *Tilia Moltki*. *Tilia flavescens*, usually found in nurseries under the name of *T. floribunda*, is a supposed hybrid between *T. americana* and the European *T. cordata*. This tree is remarkable in its rather small, thick and very lustrous leaves, and large flowers. Plants only a few feet high flower profusely.

The second North American Linden tree, *T. alba*, or, as it is often called, *T. Michauxii*, although it was first distinguished and made known nearly a century ago, was long overlooked or misunderstood by botanists; and it is only in recent years that this handsome tree has been found to be widely distributed from the valley of the St. Lawrence River to Georgia and Arkansas. It may be distinguished from *T. americana* by the pale lower surface of the leaves, which is more or less covered with star-shaped clusters of white hairs. This tree is now well established in the Arboretum, although the plants are not old enough to flower.

The third of our northern Lindens, *T. heterophylla*, is a species of the Appalachian Mountains and is distributed from western New York to northern Alabama, and through Kentucky to southern Indiana and Illinois, growing to its greatest beauty and to its largest size in the forests which cover the slopes of the mountains of North Carolina and Tennessee. The leaves of this tree are larger than those of the other Lindens, and as they are silvery white on the lower surface and hang on long, slender stalks the slightest breeze makes them turn first one surface and then the other to the eye. This hardy and beautiful tree appears to be rarely cultivated.

All the European Lindens succeed in the eastern states where they have been more generally planted than the American species and where there are large and old specimens of some of the species in the neighborhood of the seaboard cities. There are five European Lindens and it is among these and their hybrids that exists the greatest confusion in the minds of the cultivators of these trees. Probably the most widely distributed of the European species, especially in the south, is *Tilia platyphyllos*. This tree may be recognized by the yellow tinge of the leaves and the thick covering of short hairs on their lower surface and on their stalks, and by the prominent ribs of the fruit. This is the earliest of all Linden trees to flower here, the flowers having been fading for the last ten days, and it is this tree which now appears to be most commonly sold in American nurseries as the European Linden. There are varieties with leaves larger than those of the type (var. *grandifolia*), with erect branches forming a broad pyramidal head (var. *pyramidata*), and with variously divided leaves (var. *lanceolata* and *vitifolia*.)

A more beautiful tree is *Tilia cordata*, the common Linden of northern Europe where it sometimes grows to a very large size, the old historic Lindens of the northern and central parts of the continent being usually of this species. This tree is distinguished by its small, thin, more or less heart-shaped leaves which are pale on the lower surface and furnished with conspicuous tufts of rusty brown hairs in the axils of the principal veins. It appears to have been little planted in the United States, and in the neighborhood of Boston it is the rarest of the Lindens of western Europe. It is, however, a hardy and desirable tree especially valuable on account of its late flowers which supply the bees with food after those of all other Lindens have passed. There is a large-leaved form of this tree (var. *cordifolia*) from western Europe in the collection which is a handsome and vigorous plant of much promise. This is sometimes sold in European nurseries as *T. europaea* or *vulgaris*.

The third European Linden, called variously *T. vulgaris*, *T. europaea*, *T. intermedia* and *T. hybrida*, is considered by some of the best observers of European trees a natural hybrid between *T. platyphyllos* and *T. cordata*. Although widely distributed in Europe, it appears to be much less common than either of its supposed parents, and the variation in the size, shape and color of the leaves make its hybrid origin possible. On some individuals the lower surface of the leaves is quite green and on others it is bluish or even whitish, but leaves on different parts of the same branch

differ in this respect and on shoots produced from the bases of old trees the large leaves are quite green. *T. vulgaris* is a fine round-headed tree with rather small, somewhat pendulous branches, and it appears to have been more often planted in the neighborhood of Boston than any other Linden. There are a number of large specimens in front of an old house on Centre Street near Orchard Street, Jamaica Plain, and in Olmsted Park. The flowers of this tree are now fading, so in its flowering time it is intermediate between its two supposed parents. There is another supposed hybrid of the same parentage and a native of Hungary, known as *T. vulgaris* var. *pallida*. This tree has larger leaves pale on the lower surface, and in habit and general appearance resembles *T. platyphyllos* more than the commoner forms of *T. vulgaris*. It is propagated in some of the Dutch nurseries where it is sold as *T. vulgaris* or *europaea*, and in the Arboretum collection it is the most rapid growing and the most shapely of all the species and hybrids, giving promise of becoming an excellent street tree for this region.

Two Linden trees are found only in eastern Europe, the silver Linden, *T. tomentosa* or *argentea*, as it is sometimes called, and *T. petiolaris*. The Silver Linden is a tree with erect branches forming a broad, compact, round-topped formal head, and large erect leaves dark green and lustrous above and white and covered below with short thick felt. This distinct and handsome tree has not been much planted in eastern Massachusetts but it can be often seen in the neighborhood of New York and Philadelphia, and there are a number of good specimens in Central and Prospect Parks. *T. petiolaris* is a more beautiful tree; this also has leaves which are silvery white on the lower surface but they hang down on long slender stalks and flutter gracefully in the breeze. The branches, which are also pendulous, form a rather narrow but open head. This tree is not known in a wild state and all the plants in cultivation have been derived from a single individual found ninety years ago in a garden in Odessa. This beautiful tree appears to have been more often planted near Boston than the Silver Linden, but is still rare and little known here. A supposed hybrid of this tree with *T. americana* and sometimes sold in nurseries as *T. alba spectabilis* is one of the most rapid-growing of the Lindens and a very handsome tree with the leaves of the size and shape of its American parent but silvery white on their lower surface. Plants raised at the Arboretum from the seeds of a tree of *T. petiolaris* which was growing in the neighborhood of *T. americana*, the two flowering at the same time, are identical with trees of this hybrid found in European nurseries. *T. vestita* is probably the proper name for it.

Much attention in late years has been paid in Europe to another supposed hybrid Linden, *T. euchlora*, or as it is more generally known, *T. dasystyla*. This is a pyramidal tree, with large dark green leaves lustrous on their upper surface. It grows rapidly; its habit is good, and it is now largely planted as a street tree in Germany and Holland. Its origin is uncertain although usually considered a hybrid of the little known *T. rubra* of the Caucasus. *T. euchlora* is perfectly hardy here and promises to be a useful tree in New England.

As a rule the trees of eastern Asia grow much better in the eastern United States than the related species of Europe, but this is not true of the Lindens. All the European Lindens flourish here but none of the Asiatic species give much promise yet of being handsome or valuable trees in this climate. Those which have been tried here are hardy but they suffer from various fungal diseases and are short-lived. It is too soon, of course, to form an opinion on the value of the Lindens recently discovered in western China, but of those of eastern Siberia, northern China and Japan only *T. japonica* has proved really satisfactory here. This is a small tree with pendulous branches, related to *T. cordata*, of which it has sometimes been considered a variety. It has no special ornamental value, although it is perfectly hardy and healthy and flowers and produces fruit in the Arboretum every year.

### TRADE-MARKS PROTECTED

#### The Validity of Trade-Marked Varieties of Fruits is Recognized in Missouri Court

Probably the only case of its kind, that of Stark Bro's Nurseries & Orchards Company of Louisiana, Mo., vs. C. H. Hartman, a local nurseryman, came up before the circuit court of Jackson county, Mo., wherein the plaintiffs sought among other relief to protect and have recognized certain trade-marks they have obtained on choice new varieties of fruits which they have commercialized.

The following excerpts from Stark Bro's petition upon which the court granted full relief and costs, will deeply interest fruit growers and orchardists as they cover points which have long been in controversy.

"That nursery stock may be propagated and grown in different ways or systems; that plaintiff in the course of its developments and experience has originated and propagated new and distinct varieties of nursery stock never before grown; that plaintiff is the owner of certain trade-marks on certain varieties of its stock, and has obtained registration for such trade-marks, as is provided by law, and such varieties have become known to the public as having been grown by plaintiff."

Upon an order of court, with other relief, the defendant was enjoined from further selling nursery stock under names owned and registered as trade-marks of plaintiff and from carrying out and performing any contracts for stock sold by such representations.

This will mean much to the enterprising nurserymen who have had the foresight to register their introductions. In the case of Stark Bro's this will protect such of their widely advertised leaders as Delicious apple, Champion, Chicago, Giant Jeniton, Henry Clay, Ben Hur, Black Ben, Senator, Stark King David, Fame pear, Van Deman quince, Gold plum, Illinois blackberry, Banner and Stark Eclipse grapes, etc.—*Louisiana Press Journal*.

Enclosed you will please find check for one dollar (\$1.00) for which kindly renew my subscription to the NATIONAL NURSERYMAN.

I like your paper very much and would dislike very much to do without it. It has greatly improved, especially during the past year.

Yours very sincerely,

E. C. MORLEY.

## TEXAS NURSERYMEN MEET

The Texas Farmers Congress is an organization composed of twenty-five agricultural, horticultural and allied societies or bodies, which this year met July 28, 29 and 30 at College Station. Over 1900 delegates were registered present. The General Congress holds two meetings a day, while the separate organizations meet once each day. Following are the Minutes of the Texas Nurserymen's Association, Meeting, College Station, July 30, 1913

Meeting was called to order by President Phillips, at 8:30 A. M., with an attendance larger than usual for our summer meeting. Following the opening remarks by the President, and a statement from the Secretary-Treasurer as to paid up membership of the Society, and the present financial condition, Mr. J. R. Mayhew made a short talk on the support which all nurserymen were due the Association. He insisted that the Association was worthy of being maintained creditably, if at all, and called attention to important things which as an organization we had done. He especially mentioned the bill before the last general session of the Legislature, which was never made into law. On his motion, a recess was taken for the payment of dues. Motion made by Mr. Kirkpatrick, seconded by Mr. Stockwell, to exempt ladies from payment of dues, carried.

### THE TREE DOCTOR—HIS OPERATIONS—HIS WORTH

The first number on the program was to have been handled by Mr. I. M. Johnson, of Houston Heights. Serious illness in his family prevented attendance of Mr. Johnson, but Mr. J. S. Kerr lead in an interesting general discussion of the subject. He spoke of the vocations as one of growing importance, and advocated a law allowing cities and counties to appoint tree wardens or surgeons, who should look after the condition of trees generally and prevent many forms of vandalism being practised continually. He recognized the fact that at present there are good and bad surgeons, and that for the best of them there is need of keeping prices reasonable.

MR. E. S. STOCKWELL: Neglected trees along roadsides are a menace, as they may become host plants for scale, flies, and injurious fungi.

MR. E. W. KNOX: Mr. Knox drew a distinction between a tree doctor and surgeon. He spoke of an absurd treatment which a quack proposed for trees in Breckenridge Park, San Antonio, by inoculation of trees in cambium layer. For this work, a large sum would have been expended but for the interference by Mr. Knox. First cause of most trouble is lack of water, and after tree becomes weakened and less resistant, insect pests attack.

MR. JNO. F. SNEED AND MR. B. L. ADAMS: Expressed themselves as glad to see useful and honest men in the field, but wished for protection against quacks.

MR. J. R. MAYHEW: A large part of the tree doctor business graft so far. Same man was in Waxahachie as in San Antonio. Need of general requirement of credentials. Nurserymen must largely protect people until the law is perfected.

PROF. NESS: Advised cutting trees low when planted, to prevent injury by sun, while young. Mulch the trees to prevent borers. Many people take bad trees from the forest, cut off tops and limbs badly, allowing rot to start. Little remedy after the borers start.

Mr. J. S. Kerr moved that a committee of three be appointed to report at the fall meeting, and proposed a resolution asking state aid and the enactment of adequate laws. Carried. Committee appointed, consisting of J. S. Kerr, Chairman, E. W. Kirkpatrick, and J. R. Mayhew

### THE HOME CULTURE OF ROSES

In the absence of the speaker, Mr. S. R. McKee, the subject was passed over.

### HOW NURSERYMEN MAY AID FRUITGROWERS

The speaker for the subject, Mr. J. R. Mayhew, asked to be allowed to give his time to Mr. Risien, Jr., who was asked to speak on Pecans. Mr. Risien, however, preferred not to discuss the proposed subject. Mr. Mayhew then suggested that, on account of other matters to follow, his subject be omitted, and the balance of the program was taken up.

### A FEDERAL MARKETING BUREAU

Mr. J. S. Keer, the speaker, explained that, as Mr. Kirkpatrick was to handle the same subject on the general program of the Farmers Congress, he had prepared no paper, but would say a few words. He approved the plan whereby a General or Central Bureau should issue stamps to go on each box or package, the proceeds from such stamps to pay for the expenses of men, telegrams, etc., in keeping the shippers posted as to markets which were supplied or open.

### EXPRESS AND FREIGHT RATES ON BALLED NURSERY STOCK

In the absence of Mr. W. A. Stockwell, the speaker, Mr. J. H. Arbenz was requested to discuss the subject, who, however, expressed himself as not prepared, especially as he regarded it as an important one.

Discussion by E. S. Stockwell, E. Pomeroy, Sam H. Dixon, and E. W. Kirkpatrick. Mr. Stockwell moved appointment of committee of three to look after legislation on this subject. Carried, and committee later appointed, consisting of J. H. Arbenz, W. A. Stockwell, and F. T. Ramsey.

Mr. J. R. Mayhew moved election of Mr. Knox as executive committeeman to the Farmers' Congress. Unanimously carried.

Mr. J. F. Sneed and Mr. L. P. Landrum brought up subject of the Parcel Post. No action was taken.

Mr. Kerr moved vote of thanks to Dr. A. M. Ragland, of Pilot Point, for his presence, and requested that he speak to us. Dr. Ragland's presence again was a delight to all present, especially his old friends among the nurserymen



and horticulturists, among whom he was an active co-worker twenty-five years ago.

Following a few remarks on our fall (September) meeting, invitations were extended by Mr. L. J. Tackett to Fort Worth, and by Mr. M. Falkner to Waco.

Mr. F. T. Ramsey showed samples of Jujubes, kinds recently introduced by the Government from China.

Mr. J. S. Kerr showed a pecan root, that had been dug by a tree digger, when one year old, that now at four or five years consisted of four main roots, instead of one tap root. He spoke particularly of this method as applied in the case of transplanted ornamentals, which are much demanded by northern planters and landscape architects.

Mr. F. T. Ramsey disagreed as to advisability of transplanting more than one time in the nursery, as roots and bodies of trees in the southwest when transplanted several times often become hide-bound, and their growth is greatly retarded. He spoke of several instances which showed the lack of knowledge on the part of northern landscape architects of southern conditions.

As the program and all business were finished, invitation was extended to Judge C. L. Edwards of Dallas to speak on the propagation of pecans.

The day before, July 29, the Nurserymen's Association united with the Texas State Horticultural Society in a memorial meeting in honor of the late T. V. Munson, who had been from the beginning of both organizations an active and honored member. Suitable resolutions were passed, and many persons in short talks expressed their deep feelings of respect, honor, and love for this great man and his life work, and their regret at his loss from among us. It was a coincidence that six years ago, when the news came to the Texas State Horticultural Society and the Texas Nut growers, who were meeting together in Brownsville, of the death of Mr. C. Falkner, a pioneer in Texas horticulture, Mr. Will B. Munson, son of Mr. T. V. Munson presided over the meeting, when an hour was set aside to do honor to the name and memory of Mr. Falkner. It happened this year that in a similar meeting, Mr. M. Falkner, son of C. Falkner, was in the chair as president, when the hour was observed in memory of Mr. Munson. J. M. RAMSEY, Secretary.

### THE SITKA, OR MENZIES' SPRUCE

Amongst the several exotic trees which are being tried under forest conditions in England the Sitka spruce, or, giving it its correct name, *Picea sitchensis*, is likely to prove one of the most important, for it appears to be better adapted than any other tree yet tried for reclaiming wet and cold ground at a considerable altitude, while it is also spoken highly of in some quarters for planting in exposed positions about the coast.

Until recently the common spruce (*Picea excelsa*) was usually chosen for planting wet ground, but where this and the Sitka spruce have been planted side by side the latter has quickly taken the lead. When planted on wet ground, either at a low elevation or at a considerable altitude, young plants of *P. excelsa* commence to grow early in spring, and the young shoots are often crippled by frost. The Sitka spruce, on the other hand, starts into growth rather later, and is less liable to injury. It sometimes happens that trees which grow rapidly during their earlier years mature early, and are outgrown later by a kindred species which was

slower in its early days; but there does not appear to be any fear of this happening with the Sitka spruce, for in various parts of the country there are ornamental specimens approaching one hundred feet in height, with a considerable girth, but which, from the date of introduction, 1831, cannot have reached maturity yet.

As an instance of its rapid growth when planted under favorable conditions annual growths of from four to five feet in length have been measured both in Scotland and in the South-west of England. On the other hand, trees planted on the "raised turf," or "Belgian system," on bog land at elevations varying between 800 and 1,400 feet in Scotland, have formed shoots twelve to fifteen inches long in a single season, and that the second year after planting.

So far as the timber is concerned, that from native-grown trees is superior to the wood of *P. excelsa*, and there does not appear to be any reason to doubt its quality when grown in this country. Any that has been seen so far has been cut from trees grown for ornamental purposes, and it was, therefore, rough and knotty, a condition which will not apply when proper forestry methods are adopted throughout their growth.

Whether planted near the sea coast or inland, it stands wind well, and in the southwest counties it is said to be superior to either *Pinus insignis* or *Cupressus macrocarpa* for exposed situations, although these two trees are looked upon as exceptionally good subjects for providing shelter for tender subjects.

The Sitka spruce is a native of the Pacific Coast region of North America, occupying a comparatively narrow belt from Northern Alaska to California. In many parts it is found in swampy ground about the banks and mouths of rivers, and extends to the tide mark along the coast. For the latter reason it is sometimes given the name of Tideland Spruce. Under favorable conditions it attains a height of 200 feet, with a trunk diameter of fifteen or sixteen feet. The best stands are said to occur in rich, moist soil in Oregon, Washington, and in some parts of British Columbia and South Alaska. The wood is light, strong, straight-grained, and brownish in color, and the color is more especially developed in the heart wood. It is used for all kinds of building purposes, cooperage, and paper pulp, forming one of the many important commercial timbers of Western North America.

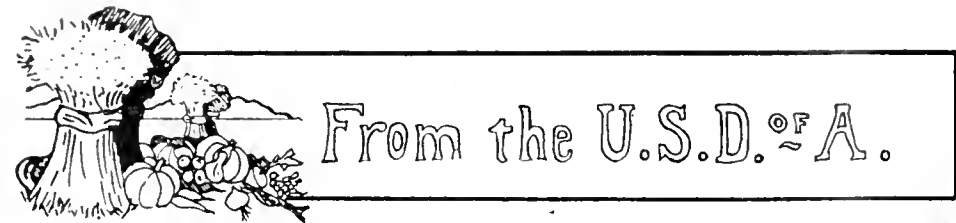
The best plantations in the British Isles, and probably in Europe, are to be found at Durrus, near Aberdeen. There are two plantations, covering about 83 acres. They stand at altitudes varying from 700 to 800 feet, and were planted on wet, boggy land, drains being opened at about eight or nine yards apart at planting time to let off some of the superfluous water. Originally, common spruce, Douglas fir, and Scots pine were mixed with the Sitka spruce, but the majority have been suppressed by the latter, and the plantations are now almost pure. The planting was accomplished in 1878, and the trees are now from thirty-five to forty feet high. No thinning has been done other than that naturally accomplished by the suppression of the weaker plants, therefore the plantations are dense enough to kill the lower branches, and so clean the trunks. Unfortunately, very few plantations were made for many years after those at Durrus were formed, and the majority of those which are now to be found are less than ten years old.

One factor working against the general planting of Sitka spruce is its price, for it is still much dearer than ordinary spruce, although it appears to be becoming cheaper. Large quantities of young plants are offered by Continental nurserymen, but many people complain about the numerous deaths which occur amongst such plants, probably due, to some extent to heating, during transit. As a rule, if plants are obtained from such sources it is advisable to procure either one-year or two-year-olds, and line them out in the nursery

previous to transferring them to permanent quarters but, many people prefer, and wisely so, to pay a little more for plants grown in this country, or to obtain seeds and raise their own.

There is one disease which attacks the Sitka spruce in common with the common spruce, that being Spruce aphid, *Chermes (or Adelges) abietis*, which punctures the young leaves, and causes them to develop into a cone-like gall, often called a pineapple gall. Nursery stock and isolated trees may be cleaned by spraying once every fourteen days during April and May with a kerosene solution, but it is almost impossible to do anything to infested trees in a plantation, because of the labor involved in thoroughly spraying them.

—W. DALLIMORE in the *Gardeners' Magazine*.



PLANT QUARANTINE DECISION NO. 4

The Federal Horticultural Board recommends that Regulation 7 of the Rules and Regulations for carrying out the Plant Quarantine Act (37 Stat., 315), as amended March 4, 1913, published in Circular No. 44, Office of the Secretary, issued May 26, 1913, be amended, to take effect as amended on and after Aug. 1, 1913, so as to read as follows:

Regulation 7. Foreign Certificate of Inspection

Each certificate and copy certificate shall give the date of inspection; name of the grower or exporter; the district or locality and the country where grown; statement that the stock has been inspected by a duly authorized official and found, or believed to be, free from insect pests and plant diseases. The original certificate shall be signed and sealed by, and the copy certificate shall bear the seal of, the responsible inspection official for the country of origin.

Permits may be canceled and further permits refused for the importation of nursery stock from any given country whenever such stock, in the judgment of the Federal Horticultural Board, is found to be so infested as to plainly indicate that the foreign inspection is merely perfunctory, and such countries shall thereafter be classed as countries which do not maintain nursery stock inspection until satisfactory evidence is presented so show that the regulations of the board have been complied with.

Lists of officials in foreign countries authorized to inspect nursery stock, giving their names and official designations, will be furnished to collectors of customs through the Secretary of the Treasury.

- C. L. MARLATT, Chairman.
- W. A. ORTON,
- GEO. B. SUDWORTH,
- W. D. HUNTER,
- A. V. STUBENRAUCH,
- Federal Horticultural Board.
- R. C. ALTHOUSE, Secretary of Board

Approved:  
FRANCIS G. CAFFEY, Solicitor.  
Hon. DAVID F. HOUSTON, Secretary of Agriculture.  
WASHINGTON, D. C., July 17, 1913.

COST OF BRINGING AN APPLE ORCHARD INTO BEARING

In a paper read before the Georgia State Horticultural Society, Mr. R. H. Black, Demorest, Ga., estimates that it costs from \$200 to \$250 per acre to bring a large commercial apple orchard into bearing.

Figuring the land at \$30.00 per acre for 300 acres, 200 of which are available for planting, he summarizes as follows:

Land \$9000.00; buildings \$4900.00; stock, \$2000.00; machinery and tools, \$1000.00; clearing land, \$2000.00; trees, planting, etc., \$2000.00 to \$4000.00; interest on investment, \$12,000.00; insurance and taxes, \$800.00; manager, \$6000.00; total, \$39,700.00.

A BIT OF HUMOR

A German florist, in a high state of irritation, related his troubles in this way. He said: "I have so much drouble vid de ladies. Ven de come to buy mine Rose dey vants him hardy, dey vants doubles, dey vants him fragrand, dey vants him nice colour, dey vants him abery dings in von Rose. I hopes I am not vat you calls von uncillant man, but I have somedimes to say to dat ladies, Madame, I never often see de ladies dat vas beautiful, dat vas rich, dat vas good demper, dat vas youngs, dat vas clever, dat vas perfection in von ladies. I see her much not."—*Journal of Horticulture and Home Farmer*.

"THE MONTHLY SUMMARY OF COMMERCE AND FINANCE" FOR JUNE, 1913, GIVES THE FOLLOWING REPORT OF IMPORTS OF PLANTS, TREES, SHRUBS AND VINES.

ARTICLES	JUNE—				ELEVEN MONTHS ENDING JUNE—					
	1912		1913		1911		1912		1913	
	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values
Plants, trees, shrubs and vines:										
Fruit plants, tropical and semi-tropical, for propagating purposes <sup>2</sup> .....		5		54				24,825		5,847
Bulbs, bulbous roots, or corms, cultivated for their flowers or foliage .....	7	93	17	109		1,636,113	216,159	1,718,839	288,646	1,823,307
All other .....		14,325		19,860		1,093,327		1,251,365		1,377 430
Total .....		14,423		20,023		2,729,440		2,995,029		3,206,584

## THE PARCEL POST SITUATION IN WASHINGTON

On this, my sixth visit to Washington in the interest of parcel post I find a condition which should interest every reader of your paper. The parcel post law contains a vital clause, proposed by the "Parcel Post Congressman," Representative Lewis of Maryland, giving the Postmaster General power, by and with the consent of the Interstate Commerce Commission, to change the zones, the weight of parcels, the carrying charge, and all conditions of mailability. Acting upon urgent requests from all over the country, Postmaster General Burleson, after most careful study, with the permission of the Interstate Commerce Commission, announced that on and after Aug. 15th, 1913, the postal service will accept parcels weighing up to 20 pounds as follows:

On rural routes only, at a charge of 5c for the first pound, and 1/2c for each additional pound, or fraction thereof. The first zone is increased to 150 miles, airline, from the receiving postoffice; and the carrying weight reduced to 5c for the first pound and 1c for each additional pound. When this ruling goes into effect a farmer can send a 20 pound package for 15c to his postoffice, or to any person on his own rural route; or 20 pounds to any postoffice within 150 miles for 24c. Thus, the weight is almost doubled and the rate cut about in half. Thereafter, ordinary postage stamps are to be used, instead of the special stamps now employed. These changes will make the parcel post service ten times more valuable than now.

But there is no peace in this world. Already there are rumblings and grumblings here in Washington, in all probability originating with the express companies, and possibly with the railroads. It is proposed to take away from the Postmaster General the power to improve the parcel post service, even with the consent of the Interstate Commerce Commission. But is not this delegation of power as now expressed in the law, just what it should be? How can Congress which each session is called on to consider about 40 000 bills, ever attend to all the details of our great postal system, which so vitally affects every citizen? It will be time enough to limit the powers of the Postmaster General when it shall have been found that he is working against the wishes and needs of the people in postal matters—till then, by all means let the present law stand.

To head off this sinister purpose, and thereby save parcel post, each and every farmer should at once write a brief, courteous letter to his two Senators and his Representative in Washington, urging him to leave the present law alone and stand by Postmaster General Burleson in his effort to improve the parcel post service. Now is the time to tell your Congressman how valuable the parcel post system already is, and how much you approve the proposed changes. Write and mail these letters at once, for there are forces at work the aim of which is to tie the hands of the Postmaster General and once for all destroy the efficiency of the parcel post system.

Do you want a still better parcel post? Speak out NOW, and SPEAK PLAIN.

W. A. HENRY,

Emeritus Professor of Agriculture, formerly Dean College of Agriculture, University of Wisconsin.

Present address, Blue Hills Farm, Wallingford, Conn.

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**FOR SALE** The Nursery Business of the Estate of H. W. Blowers. The stock is as follows:

3½ acres of Conecord roots of one and two years' growth.  
5 acres Blowers' Blackberry root-cutting plants, planted this spring, making a fine growth under good cultivation.

Stark Bros' representative says it is as good a field of Blackberries as he has ever seen. Building, lot and cellar suitable for this business, and control of the Blowers' Blackberry. Here is a chance for the right man to secure a live business at a small figure and make some money.

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1000 Catalpa Bungei, 5-6, 6-7 ft.

16000 Maple, Soft, 1¼ to 2¼ inch

Tea's Mulberry, 2 year heads.

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**Sacrifice Sale** of No. 1 Apple and Pear Trees. Extra fine, but on leased land and must be sold quick. Leading varieties. Prices to suit buyers. Place your orders now for our standard Blackberry root-cuttings at half price.

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**TREES FOR SALE** in Box or Carload Lots—Pears, 1, 2, 3 years; Plums, 1-2 years; Cherry, 1-2 years; Apples, 1-2 years; Car. Poplar, 1, 2, 3 years.

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Large assortment of Tree, Shrub and Fruit Seeds for ornamental and forestry purposes. Send for catalogue.

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## Strawberry Plants

My 1913-14 Trade List now ready. 63 varieties, millions of them for Fall delivery.

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Different Varieties, and Prices to Suit. Write for Sample and Price.

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We will have to offer for Fall 1913 and Spring 1914

**A FINE LOT OF JUNE BUDS AND YEARLING APPLES**

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# C. & J. Well-known Shrubs and Roses

### Althea

Banner, 12 to 15 in.

" 2 to 3 ft.

" 3 to 4 ft.

" 4 to 5 ft.

Bicolor, 12 to 15 in.

" 4 to 5 ft.

C. Flanders, 3 to 4 ft.

Double Pink, 12 to 15 in.

" " 2 to 3 ft.

" Red, 12 to 15 in.

" " 2 to 3 ft.

" " 3 to 4 ft.

" " 5 to 6 ft.

" Violet, 12 to 18 in.

" " 18 to 24 in.

" " 3 to 4 ft.

Jeanne d'Arc, 18 to 24 in.

" " 2 to 3 ft.

" " 3 to 4 ft.

" " 3 to 4 ft., 3 yr.

" " 4 to 5 ft., 5 yr.

" " 6 ft.

Meehani, 3 to 4 ft.

Pink, 5 to 6 ft.

Ranunciflora, 2 to 3 ft.

Violet Clare, 18 to 24 in.

" " 3 to 4 ft.

### Deutzia

Crenata, 2 to 3 ft.

" 3 to 4 ft.

### Deutzia

Gracilis Rosea, 2 to 2½ ft.

Lemoinei, 2 to 3 ft.

" 3 ft.

Pride of Rochester, 2 to 3 ft.

" " 3 to 4 ft.

### Euonymus

Japonica, 12 to 18 in.

### Forsythia

Golden Bells, 2 to 3 ft.

Fortunei, 3 to 4 ft.

### Hydrangea

Paniculata Grandiflora, 2 ft.

" " 2 to 2½ ft.

" " 3 ft.

" " 3 to 3½ ft.

### Japan Maples

Atropurpureum Dissectum, 18 to 24 in.

### Lonicera Tatarica (Bush Honeysuckle)

### Mock Orange

Philadelphia, single, 2 to 3 ft.

" " 3 to 4 ft.

" Double, 3 to 4 ft.

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Anthony Waterer, 2 to 2½ ft.

### Spirea

Frobellei, 2 to 2½ ft.

" 2 to 3 ft.

Prunifolia, 2 to 3 ft.

" 3 to 4 ft.

" 3 to 4 ft., 3 yr.

Van Houttei, 2 to 3 ft.

" 3 to 3½ ft.

" 3 to 4 ft.

" 4 to 5 ft.

### Viburnum

Plicatum, 2 to 3 ft.

" 3 to 4 ft.

### Weigela

Candida, 2 to 2½ ft.

" 3 to 4 ft.

" 4 to 5 ft.

Eva Rathke, 2 to 2½ ft.

" 2 to 3 ft., 2 yr.

" 2 to 3 ft., 3 yr.

" 3 to 4 ft.

Rosea, 2 to 2½ ft.

" 2 to 3 ft.

" 3 to 4 ft.

Variegated, 2 to 2½ ft.

### Barberry

Thunbergii, 12 to 18 in.

" 18 to 24 in.

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Growers  
of  
General  
Nursery  
Stock



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Apple trees (grafted), one and two years  
Apple trees (budded), one and two years  
Kieffer and Garber Pear, one and two years  
Gooseberries Rhubarb, Shade Trees,  
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Maple, Mountain Ash, Carolina  
Poplar, Volga Poplar, White Wal-  
nut, Black Walnut, Honey Lo-  
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A Large Stock of

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And a general line of **ORNAMENTAL TREES** and **SHRUBS**. All stock clean and thrifty, the best that can be grown.

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Copper Beech Seedling and grafted in  
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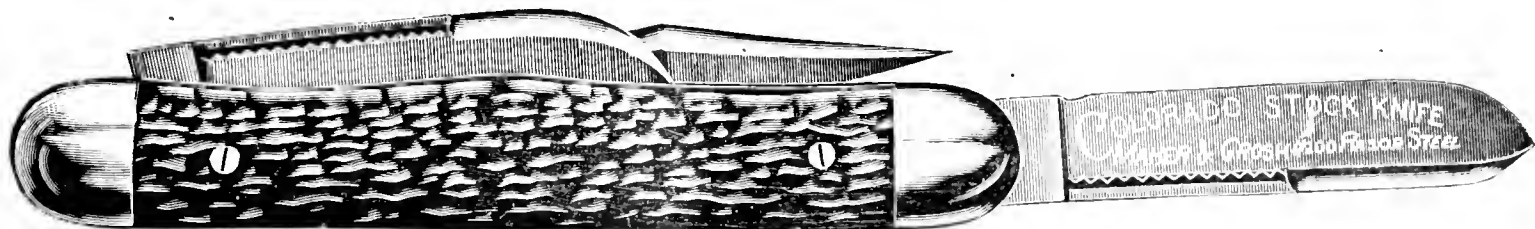


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Red, Black, Yellow, and Purple Raspberry Plants; Blackberry; Dewberry; Downing, Pearl, Josselyn, and Houghton Gooseberry Plants, one and two year, No. 1; 150,000 Rhubarb, one and two year, No. 1, whole roots and divided; Horseradish Sets; Gooseberry layer plants of Downing, Pearl, Josselyn, Houghton, and Mt. Seedling. An extra large stock of Blackberry Root Cutting Plants for late fall shipment. Trade list ready Sept. 20th.

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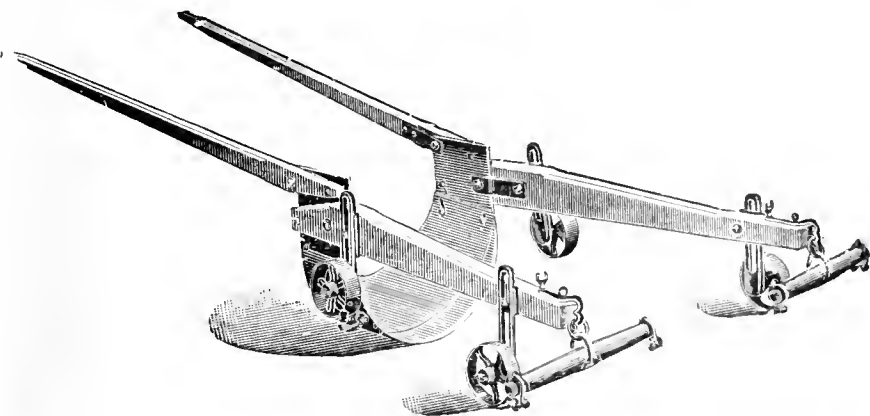
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There's none finer anywhere. This, and the fact that my prices are attractive and service prompt, should appeal to the good judgment of my fellow nurserymen everywhere, who want something a little nicer than the other fellow has. I solicit the wholesale trade. I have an unusually liberal quantity of **Golden Queen, Herbert, St. Regis, Columbian, Haymaker**, and a dozen others in Red and Black Raspberry; also a splendid lot of **Eldorado, Early King, Early Harvest, Mercereau** Blackberries, **Lucretia** and **Austin Dewberry** and 100,000 **Blower Blackberry**. Also a million **Strawberry** and then some. **WRITE.**

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INCORPORATED 1902

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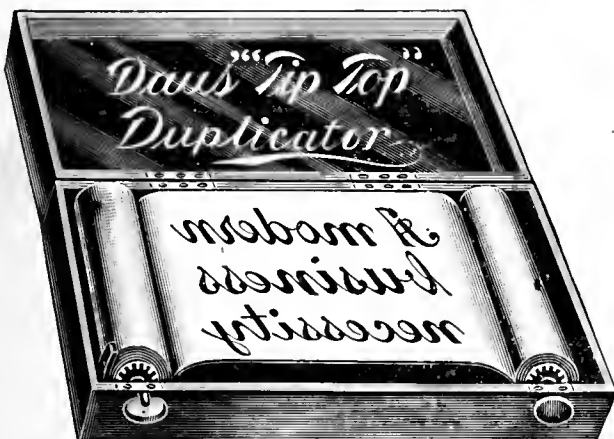
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This picture was taken on July 31, 1913, and shows one of the trees in our test peach orchard. We have over a hundred varieties of peaches, six or more trees of each. Careful records are kept showing when the tree was planted, its habit, time of bearing, quality of fruit, etc., and from the best of these tested trees we cut buds for use on our peach trees.

Just as far as we can, we follow the same plan for apples, cherries, pears and other fruits. This means that every little tree comes from a healthy, bearing parent, and, therefore, it should possess qualities of productiveness that cannot obtain in trees budded from unknown sources. Harrison's trees are making good wherever they are planted, because they are started right in the beginning.



## Think What This Means to You!

When you fill your orders with Harrison-grown trees you know you are getting trees that are right—you can safely guarantee them to your trade.

Another thing—*under no circumstances will we ship you trees that have not been grown by ourselves.* You are safe when you ship Harrison trees to your most "cranky" customer, and the trees will back up any claim you make.

Trees grown in Harrison's Nurseries are bigger at any age than most others; they are hardy everywhere, even as far north as Nova Scotia; they have well-ripened wood when we sell them; they have well-developed root systems, fine and fibrous, ready to grow anywhere; they are clean, free from scale and disease.

**Come to Berlin,** see the nurseries, the bearing orchards, the way we do things here. Look over the great blocks of Baldwin, Stayman, Yellow Transparent and York Imperial apple trees. See the millions of peach trees—Elbertas and Crawford's particularly. Then have a look at the ornamental section of the nursery, where we grow Norway and Silver Maples, Colorado and Koster's Blue Spruce, Norway Spruce and Pine. There are lots of other things you will want to see, too. We will pay your hotel bill while here.

**Send for our Wholesale List,** and look over the stock we offer. Place your order now—we will hold the trees until you want them shipped. Our shipping service can take care of your order promptly and in good shape—let us show you.

# HARRISON'S NURSERIES,

# BERLIN, MARYLAND



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*CHOBERT*  
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# THE NATIONAL NURSERYMAN



OCTOBER, 1913

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

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Established 1847.

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## CHERRY and STD. PEAR

of Extra Fine Quality.

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### OUR LEADING SPECIALTY

RHODODENDRONS, HEMLOCKS, WHITE  
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of specimen ornamentals.

ALSO

NORWAY MAPLES, PIN OAKS, IBOTA  
PRIVET, SPIRAEA VAN HOUTTEI  
by the thousand.

## Andorra Nurseries,

WM. WARNER HARPER, Prop.

CHESTNUT HILL, PHILA., PA.

## MOUNT ARBOR NURSERIES

E. S. WELCH, Proprietor

136 Center St., Shenandoah, Iowa

Make a Specialty of a Complete Line of High Quality Nursery  
Stock for WHOLESALE TRADE

APPLE—We wish to call your attention to our fine lot of Apple  
for this season's trade. They are the best we have  
ever grown. None better on the market. Let us quote  
your wants in these.

Large stock of Peach, Plum, Cherry, Currants, Gooseberries,  
Blackberries, Root-Cutting Plants.

ORNAMENTALS—Elm, American White; Maple, Silver  
Leaved; Privet, California and Ibota.

ROSES—Hybrid Perpetuals, Moss and Ramblers.

FOREST TREE SEEDLINGS

APPLE SEEDLINGS

APPLE GRAFTS, made to order

Ask for our Fall Trade List, which will be issued early in Sept.  
Always pleased to quote your wants

## THE JEWELL NURSERY CO.

*Wholesale Nurserymen*

LAKE CITY, MINNESOTA

Established 1868

1500 Acres

Everything in the line of Nursery Stock  
suited to Northern culture.

*Let us figure with you*

Now is the time to place your orders for  
**Direct Importations**

from European Nursery Centers

**FRENCH FRUIT STOCKS**

Apple, Pear, Myrobolan, Mahaleb, Maz-  
 zard Seedlings, Manetti, Multiflora and  
 Quince stocks. Also full line of Orna-  
 mental for lining out, from Vincent Le-  
 breton's Nurseries, Angers. Best pack-  
 ing and grading. December or February  
 shipment from France.

**Boskoop, Holland, Nursery Stock**

Boxwood (pyramids, bushes, standards,  
 ball-shape, etc). Roses, Tree Roses, Rho-  
 dodendrons, Azaleas, Magnolias, Koster  
 Blue Spruce, Evergreens, Hydrangea P.  
 G., etc., etc., from Schaum & Van Tol,  
 Boskoop.

**DECIDUOUS TREES**

Norway and Schwedler Maples, Tili-  
 as, Elms, Chestnuts, Oaks, Planes, Thorns,  
 etc., etc., etc., straight stems and good  
 roots, careful selection, best packing from  
 Union Nurseries, Oudenbosch, Holland.

Besides representing the above firms  
 as Sole American Agents, we import to  
 order

**FROM JAPAN AND ENGLAND**

English Manetti, Gooseberries 2 and 3-yr.  
 (Whinham Industry, Whitesmith, etc.),  
 Japanese Nursery Stock and Lilies.

**BAY TREES.** Standards, Pyramids and  
 all shapes from Belgium, Fall or Spring  
 shipment.

**RAFFIA.** Red Star Brand and four  
 other grades; also dyed Raffia in 20 colors.  
**WRITE US** for catalogs, special lists,  
 etc., stating the class of stock you are  
 interested in.

**SHIPPING.** We have our own Custom  
 House Dept., with shipping connections  
 at Havre, Hamburg, Rotterdam, Antwerp,  
 Southampton, etc.

**McHutchison & Co.**

17 Murray St.  
 New York

The Import  
 House

**SIMPSON**

is the name of the men who grow the finest

**CHERRY**

that can be produced by suitable soil, climate and  
 expert knowledge.

Take a look at the stock or ask for a sample and  
 be convinced of the extra quality of their

**TREES**

PEACH

ST. PEAR

APPLE—1 year, 2 year and 3 year  
 AMERICANA PLUM ON PLUM  
 COMPASS CHERRY ON PLUM

**H.M. Simpson & Sons**

VINCENNES, INDIANA

**Griffing Brothers**

**Grow the Better Kind of Trees**

**PECANS,** Budded or Grafted

**PLUMS** on Plum Roots

**PERSIMMONS,** Japanese

**FIGS,** Celestial, Magnolia, Brown Turkey  
 varieties

**SCUPPERNONG, JAMES** and other Mus-  
 cadine Grapes

**MULBERRIES,** well branched trees, free  
 from Blight

**CAMPHOR** Trees

**CONIFERS** and Evergreen Trees

**PALMS** and Tropical Plants

**SATSUMA** Orange and other Citrus Fruits

Prices are Right

Trees are Right

**Griffing Brothers**

JACKSONVILLE, FLORIDA  
 MIAMI, FLORIDA

MOBILE, ALABAMA  
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# NURSERYMEN AND FLORISTS

looking for stock can find  
largest assortment in the  
United States at the . . .

## Painesville Nurseries

Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses,  
Vines and Plants, Grapes, Gooseberries, Small Fruits, Bulbs, Seeds,  
Palms and other tender Greenhouse Plants

Have large stock stored in frost-proof cellars that can be shipped at any time  
desired; switch from N. Y. C. lines direct into our packing house; can load without  
exposure. Unsurpassed facilities for handling orders large or small.

CATALOGS AND PRICE LISTS FREE



Avenue Planted with American White Ash

**A FEW SPECIALS WHILE THEY LAST: STANDARD PEARS** in assortment, **DUCHESS**  
**DWARF PEARS**, **BOURGEAT QUINCE**, **PRUNUS PISSARDI** and **TRILOBA**, **CUTHBERT** and  
other Raspberries, **CONCORD** and other **GRAPES**

### OUR SPECIALTIES ARE

Roses, H. P. Moss, Ramblers, Climbers, etc., Peaches, Pears, Plums, Cherries,  
Ornamental Trees and Shrubs in car lots, Weeping Mulberries, Elm and Ash,  
Clematis, Ampelopsis, Paeonies, Hydrangeas, Bush and Tree Perennial Plants.

No Trouble to Price your List of Wants. 59 Years 1200 Acres 44 Greenhouses

**THE STORRS & HARRISON CO.**  
PAINESVILLE, OHIO



# WATCH OUR BULLETINS

IF NOT ON OUR MAILING LIST  
WRITE US

**C. R. BURR & CO.**  
MANCHESTER, CONN.

## SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY  
PEACH PLUM

A Fine Block of  
Own Root Roses

ORNAMENTAL TREES SHRUBS  
BERRIES CLEMATIS  
EVERGREENS PEONIES PHLOX  
PYRAMIDAL and STANDARD  
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists  
and carload lots.

**W. & T. SMITH COMPANY**

GENEVA, N. Y.

63 Years

700 Acres

## We Are Now Ready

to quote prices on a fine assortment of  
Select Nursery stock for Delivery Fall  
1913 and Spring 1914

**Apple**—One and two year.

**Cherry**—Iowa, New York, and Indiana grown.

**Peach**—One year. Good selection.

**Pear**—Standard, and Dwarf. Budded on French  
pear and quince roots.

**Plum**—Native, European, and Japanese.

**Currants**—All leading varieties.

**Grapes**—New York vines.

**Gooseberries**—Acres of Downing, Houghton,  
Champion, and Red Jacket.

**SMALL FRUITS, SHADE TREES, and  
ORNAMENTALS**

**Forest Tree Seedlings**—A large supply.

**Imported Fruit Tree Stocks**—A full line. All  
grades.

**Apple Seedlings**—One of our leading specialties.

Let us have your list of wants.  
Will save you money.

**The Shenandoah Nurseries**  
SHENANDOAH, IOWA

Established 1870

D. S. Lake, Proprietor

## BERCKMANS' SPECIALTIES

WE OFFER TO THE TRADE THE FOLLOWING

### CONIFERS

Biota aurea nana, all sizes. Biota aurea conspicua, from 2 to 12 ft.  
Retinosporas, various sorts. Thuya Pumilla,  
Cupressus pyramidalis, from 1 to 10 ft. Junipers, in variety.

### BROAD-LEAVED EVERGREENS

Aucuba Azalea Indica  
Berberis Japonica Camellia Japonica  
Camphor English Laurel  
Gardenias Ligustrums, in variety  
Magnolia Grandiflora Olea fragrans  
Magnolia fuscata Osmanthus aquifolium

### HEDGE PLANTS

Dwarf Box Citrus Trifoliata  
Privet, California and Amoor Spiraea Thunbergii

### CLIMBERS

Ampelopsis quinquefolia Euonymus radicans  
Ampelopsis Veitchii English and Algerian Ivy  
Rhynchospermum Roses, field grown, own roots and  
Wistaria, grafted, best sorts budded

### DECIDUOUS SHRUBS

Cornus Deutzias  
Exochorda Hydrangea, Otaksa, etc.  
Philadelphus Pomegranates  
Spiraeas Lilacs, best sorts, grafted  
Styrax Japonica Cercis Japonica

### SHADE TREES

Elms Hackberry  
Magnolia purpurea Salisburia  
Texas Umbrella Tulip Poplar  
Cercis canadensis Weeping Mulberry

### FRUIT AND NUT TREES

Apples, leading sorts Peaches, never offered better stock  
Mulberries, grafted Spanish Chestnuts  
Figs Nectarines  
Olives Almonds  
English Walnuts Japan Walnuts

We grow a general line of nursery stock for the northern as well as the  
southern trade. Wholesale and retail catalog for the asking.

**P. J. BERCKMANS CO., Incorporated**

FRUITLAND NURSERIES

AUGUSTA, GEORGIA

Established 1856. Over 450 acres in nursery.

## The Best Tree Digger on Earth



Used and Recommended by Leading Nursermen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

**Stark Bros. Nursery & Orchards Co.**

LOUISIANA, MO.

# L. Spaeth

BERLIN  
Baumschulenweg  
GERMANY

## Largest Nurseries in Europe

2000 ACRES

FOUNDED 1720

### HARDY TREES AND SHRUBS

1. Our nurseries lie in a colder climate than the French, Dutch and English nurseries—
2. We grow all the stock we sell—
3. Moderate prices. Catalogs free—
4. When in Europe come and see our nurseries—

We have every facility for growing evergreens from seed—*plus* the finest natural location that we know of in the United States, *plus* over 50 years' practical knowledge of how to do it best. We are now growing millions of them

for nurserymen's and dealers' trade, lining out, etc., and you will find

## Hill's Evergreens

the best investment you can make—if you are looking toward permanent results and satisfied customers, as well as the first cost of the trees. We go to a great deal of trouble and expense gathering and sowing our seed, but we think it's worth it all to know that the little trees are true to name, and healthy and vigorous. Our customers, too, have found that it's worth the cost to know that they're getting *reliable* trees when they buy here. If you want the best evergreens you can get for your trade let us tell you more about those of "Hill Quality."

**THE D. HILL NURSERY CO., Inc.**

*Evergreen Specialists*

D. HILL, President Box 401, DUNDEE, ILLINOIS

Have you seen and examined the quality and finish of our

## Rawhide Brand of Shipping Tags and Tree Labels

printed or plain, strung or wired?



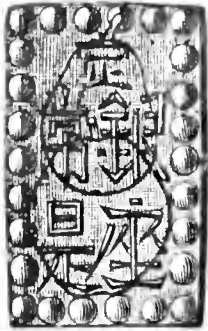
This stock is especially adapted to the most severe usage, being thoroughly waterproof & weather-proof. "Once used, always used."

Send for samples and prices. Our reference are the largest nursery men in the United States.

## The Denney Tag Co.

WEST CHESTER, PENNSYLVANIA

# Heikes --- Huntsville --- Trees



**Huntsville  
Wholesale Nurseries  
Huntsville, Ala.  
JESSIE S. MOSS, Prop.**

We offer for Fall of 1913  
in large quantities as usual:

## SPECIALTIES

**APPLES**—Commercial varieties, one and two year, in large supply. As fine in quality as ever grown.  
**PEARS**—Kieffers, one and two years old. A much smaller crop than heretofore.  
**CHERRIES**—On Mazzard. Two year, Bing, Lambert, Napoleon, Black Tartarian.  
**CHERRIES**—On Mahaleb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.  
**PEACHES**—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.  
**ROSES**—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.  
**PRIVET**—Amoor River (South). Retains its foliage longer and holds its color better than California Privet.  
**PECAN SEEDLINGS**—Huntsville grown from selected nuts collected along the Gulf Coast. Thin shell.

See Price List for Particulars.

Address, **HUNTSVILLE WHOLESALE NURSERIES**  
**HUNTSVILLE, ALA.**

# Budding Time!

**RAFFIA.** How are you fixed? We can sell you from one to fifty bales and ship same day. We call it the "J&P Preferred" brand—clean, white, wide, long strands,—just what you want for budding; there's too much waste in short Raffia.

**BUDDING KNIVES.** Plenty on hand? Always a good plan to have a few extra ones—the boys will lose 'em, you know.

**FERTILIZER SOWER.** We sell a good one—pays for itself over again every summer—saves material, time and labor. Send for Price List of useful tools and things needed around the nursery.

**Jackson & Perkins Co.**  
**NEWARK, NEW YORK**

JUNE 1913

## BOBBINK & ATKINS

**World's Choicest Nursery and Greenhouse Products**

<b>EVERGREENS and CONIFERS,</b> in several hundred kinds and varieties	<b>PALMS and BAY TREES</b> by the thousands
<b>ROSES,</b> in all kinds and varieties	<b>FRUIT TREES,</b> home-grown, imported, DWARF and TRAINED
<b>RHODODENDRONS,</b> Hardy, ENGLISH HYBRIDS, Maximum and Catawbiense	<b>SMALL FRUITS,</b> in all kinds and varieties
<b>BOXWOOD,</b> in all shapes, forms and sizes	<b>NUT TREES,</b> profitable kinds
<b>HARDY AZALEAS,</b> in all colors and varieties,	<b>OLD-FASHIONED,</b> Hardy FLOWERING PLANTS, in thousands of kinds and varieties
<b>HEDGE PLANTS,</b> in all popular kinds	<b>PAEONIAS, IRIS, PHLOX</b> FERNS, and <b>HARDY GRASSES</b>
<b>FLOWERING SHRUBS,</b> in bush and standard forms in hundreds of kinds and varieties	<b>KITCHEN</b> HERBS and ROOTS
<b>SHADE TREES,</b> in hundreds of useful and attractive varieties	<b>RUTHERFORD PARK LAWN</b> GRASS SEED
<b>MAGNOLIAS</b> and other FLOWERING TREES	<b>AUTUMN BULBS,</b> Dutch, French and Japanese kinds
<b>WEeping and STANDARD</b> TREES, in many varieties	Interior and Exterior <b>DECORATIVE PLANTS,</b> in a large variety
<b>JAPANESE MAPLES,</b> in all varieties and colors	<b>PLANT TUBS,</b> in all shapes and sizes. Ask for special list
<b>HARDY TRAILING VINES</b> and <b>CLIMBERS</b>	<b>VISITORS</b> to our nurseries are always welcome
<b>HARDY VINES and CLIMBERS</b> in pots	<b>SEND IN YOUR LISTS FOR</b> QUOTATIONS
<b>SPRING and SUMMER</b> FLOWERING BULBS, ROOTS and PLANTS	

**Nurserymen, Florists and Planters**  
**RUTHERFORD, N. J.**

# BRIDGEPORT NURSERIES

*OFFER A GENERAL ASSORTMENT  
OF NURSERY STOCK*

**Apple, Catalpa Speciosa Seedlings**

**Shade and Ornamental Trees**

IN LARGE QUANTITY

WRITE FOR PRICES

**C. M. HOBBS & SONS**  
**BRIDGEPORT, IND.**



## SEEDLING EVERGREENS

BY THE MILLIONS

Arbor Vitae	Jack Pine
Austrian Pine	Norway Spruce
Black Hill Spruce	Pinus Ponderosa
Colo. Blue Spruce	Pitch Pine
Concolor	Red Spruce
Douglas Spruce	Scotch Pine
Engelmanii Spruce	White Pine
European Larch	White Spruce

All sizes. Ask for prices.

SPECIAL QUOTATIONS ON LARGE ORDERS

Also the following **APPLES** in 1-2", 5-8" and 11-16" sizes at special prices:

**Ben Davis, Duchess, Florence, Gano, Hibernial, Iowa Beauty, N. W. Greening, Okabena, Patten's Greening, Peerless, Peter, Pewaukee, Scott's Winter, Soulard, Strawberry Crab, Transcendent, University, Virginia, Wealthy, Whitney and Wolf River.**

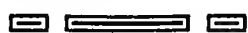
**SHERMAN  
NURSERY COMPANY  
CHARLES CITY, IOWA**

64TH YEAR

**Baltimore Nurseries**

**FRANKLIN DAVIS  
NURSERY COMPANY**

**Baltimore, Md.**



We offer for Fall 1913 and Spring 1914:

HIGH GRADE STOCK.

General Line:

PEACH, APPLE, PEAR, CHERRY, PLUM, CALIFORNIA PRIVET in 1 and 2 year fine stock.

ORIENTAL PLANES, NORWAY MAPLES, AMERICAN ELMS, SILVER MAPLES, HORSE CHESTNUTS, ETC.

Will make prices right on Peach and Privet in carload lots for early orders.



**SEND US YOUR LIST  
OF WANTS**

## Oriental Planes All Sizes From 1 1/4 to 2 1/2 inch Caliper

12000 Kieffer Pears, 5 to 7 ft., 3/4 in. and up  
2500 " " 4 to 6 ft., 3/8 in. and up  
2500 Rossney Pears, 5 to 7 ft., 3/4 in. and up  
4000 Yellow Transparent Apples, 1 1/8 in. and up  
16000 York Imperial Apples, 1 1/8 in. and up  
15000 Stayman's Winesap Apples, 1 1/8 in. and up

DOUBLE FLOWERING PEACHES

DOUBLE FLOWERING JAPAN CHERRIES

WEeping JAPAN CHERRIES

FLOWERING APPLES

ASPARAGUS, STRONG 2 YEARS

Large and complete assortment of Ornamental Trees and Flowering Shrubs, etc.

**Hoopes, Bro. & Thomas Co.**

MAPLE AVENUE NURSERIES

WEST CHESTER, PA.

PHILADELPHIA

OFFICE:

222-3-4-5 Stephen Girard Bldg.,

21 So. Twelfth Street

### Raffia

Red Star Brand Raffia is the most satisfactory brand on the market. Guaranteed high class quality at a reasonable price. We can also supply other brands. Send for our Price List.

### Fruit Seeds

We will have our usual supply: Mahaleb Cherry; French, Japan, and Kieffer Pear. Myrobolan Plum. French Crab Apple and Quince Seeds to offer this year. Mazzard Seeds are very scarce. All orders for fruit seeds should be placed early.

### Tree Seeds

A most complete assortment of Evergreen and Deciduous Tree and Shrub Seeds. All seeds fresh and of good germinating quality. New catalogue ready September 1st.

### Small Stock for Lining Out

We are booking orders now for Spring delivery. Let us know your wants.

### Ornamental Nursery Stock

Fall Trade List ready about September.

**THOMAS MEEHAN & SONS**

Wholesale Nurserymen and Seedsmen

DRESHER

PENNSYLVANIA

35TH YEAR  
**Pan Handle Nurseries**

WE OFFER A COMPLETE ASSORTMENT OF NURSERY STOCK CONSISTING OF

Apple	Poplar Carolina	Ampelopsis
Pear	Poplar Volga	Roses
Plum	Elm American	Evergreens
Cherry	Sycamores	California Privet
Peach	Mountain Ash	Buxus
Grape	Althea	Weeping Trees
Currant	Hydrangea	Catalpa Seedlings
Gooseberry	Barberries	Black Locust "
Small Fruits	Syringae	Fruit Tree "
Maple Norway	Clematis	Catalpa Speciosa Seed.
Maple Schwedlers	Honey Suckle	Etc., Etc., Etc.
Maple Silver	Wistaria	

Our stock is well grown and graded. Prices are such that it will pay to investigate. Come and see us or write.

**J. K. HENBY & SON**  
GREENFIELD, IND.

**FOSTER-COOKE CO.**

Nurserymen

**Fredonia, N. Y.**

GROWERS OF

**Grape Vines, Gooseberries  
and Currants**

One and two years old. Graded up to the highest standard. Our stock for fall of 1913 never looked more promising than now. Write us for catalog. Send us your list of wants. Our prices are right, our stock A No. 1.

**WOOD LABELS**

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

**Dayton Fruit Tree Label Co.**  
South Canal St., Dayton, Ohio

**The Framingham Nurseries**

200 Acres  
High Grade  
Trees, Shrubs,  
Evergreens,  
Vines, Roses,  
Etc.

Fine Stock  
of  
Rhododendrons  
Kalmias  
and  
Andromedas

Send for Price List.

**W. B. WHITTIER & CO.**  
Framingham, Mass.

WE OFFER FOR FALL 1913:

**Norway Maple Silver Maple  
and Carolina Poplar**

IN CAR LOTS ALL SIZES  
GET OUR PRICES

**The Greenbrier Nursery Co., Inc.**  
GREENBRIER, TENNESSEE

**SCARFF'S PLANTS**  
equal to any  
on the market

Small Fruit Plants our specialty for 25 years. 100,000 Transplanted Raspberry, Blackberry and Dewberry plants, fine for critical retail trade.

Currant, Gooseberries, Grapes, Horseradish, Asparagus, Rhubarb, etc. Hardwood cuttings and layers in large quantities. See our wholesale list before placing your order.

**W. N. SCARFF**

NEW CARLISLE, OHIO

**Evergreen Seedlings  
and Transplants**

FALL OR SPRING  
DELIVERY

LET US QUOTE YOU ON  
**TREE SEEDS**

**The North-Eastern Forestry Co.**  
"WE RAISE OUR OWN TREES"

New Haven, Conn.

NURSERY AT  
Cheshire, Ct.

SEEDHOUSE AT  
Willsboro, N. Y.

**Fall, 1913 Spring, 1914**

WE OFFER

40,000 Duchess of Oldenburg Apple, 2 and 3-year  
60,000 1 and 2-year Apple in Grimes, Northern Spy, Baldwin, Wagner, Yellow Transparent, Maidens Blush and Stark. 5,000 2-year Keiffer Pear.

A large portion of the above will run in the heavier grades.

150,000 Downing and Houghton Gooseberry Layers.  
Standard Grades. Low Prices.

**A. HAMILTON & SONS**  
BANGOR MICHIGAN

## Fumigation with Hydrocyanic Acid Gas Generated From Cyanide <sup>98%</sup>/<sub>99%</sub>

Is the only positive eradicator of San Jose Scale and other Insect Pests. Endorsed by all agricultural experiment stations.

Manufactured by

**The Roessler & Hasslacher Chemical Co.**

100 WILLIAM ST., NEW YORK

## FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

*OFFER for Fall 1913*

**GRAPE VINES**—One and two years old. Varieties largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all cleaned and guaranteed first class.

Correspondence solicited. Price list upon request.

**CHAS. M. PETERS**

P. O. Address, Salisbury, Wicomico County, Md., R. F. C. 3  
Long Distance Phone and Telegraph, Salisbury, Md.

## "Everything for the Nurseryman"

### COLORED PLATES

All kinds. Plate Books, Folios, Maps, Cards,  
Printed Forms, Circulars, and

PROMPT SERVICE

**Rochester Lithographing Co.**

22 Elizabeth St., Rochester, N. Y.

## Westminster Nursery

Westminster, Md.

J. E. STONER, Prop.

We are pleased to offer for Fall 1913

Peach Trees, 1 year, 35 varieties

Apple, 1 year mostly buds

Pear, 1 and 2 year, all grades

Apple, 2 year, all grades

Cherries, 2 year, general list sour

Asparagus, 2 year

Can furnish the above in carload lots or less, also

Grapes, Currants, Gooseberries, Catalpa Speciosa, Carolina Poplar  
Ornamentals in good assortment

**WE WOULD MAKE VERY ATTRACTIVE PRICES ON PEACH  
TREES IN CARLOAD LOTS.**

*Please submit list of wants for prices. We have a few N. C. Natural  
Peach Seeds to offer. Crop 1912, also Crop 1913.*

When writing to Advertisers please mention The National Nurseryman

## WE OFFER

For FALL 1913

Grape Vines, Currants and Gooseberries  
in all varieties and Grades

—also—

Grape and Currant Cuttings and Light  
Grade of Vines for Lining Out  
in Nursery Rows

WRITE FOR PRICES

**F. E. SCHIFFERLI, Fredonia, N. Y.**

## Vincennes Nurseries

Vincennes, Ind.

W. C. REED, Prop.

We are pleased to offer for Fall, 1913,

**CHERRY**—Two Year. All leading sour varieties.

**CHERRY**—One Year. General list leading sorts sour and sweets.

**PEACH**—One Year. 30 varieties.

**APPLE**—Two Year. All grades.

**APPLE**—One Year. Cut Backs very strong.

**SILVER MAPLE**. All grades.

Can furnish the above in Carload Lots or less. Also Pear, Plum, Quince, Compass Cherry, Currants, Gooseberry, Catalpa Speciosa and ornamentals in good assortment.

Please submit list of wants for prices. Personal inspection invited.

We are now ready to quote lowest prices on  
**FRUIT, SHADE AND ORNAMENTAL  
TREES, SHRUBS, EVERGREENS,  
VINES and HERBACEOUS  
PLANTS**

**FOREST TREE SEEDLINGS** we only have in limited supply  
this season, and would advise placing your orders early.

**TREE SEEDS** we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list  
ready end of September.

**The Willadean Nurseries**

SPARTA, KY.

We have a splendid stock of

## Grape Vines

and other small fruit plants for the Nursery  
trade, graded up to the highest standard  
and sure to please you.

Give us a trial order, send in your list now for quotations

**WILLETT & WHELOCK**

North Collins, N. Y.



# A DRY WEATHER TOOL

The packer shown in cut is one of our drouth resisters. This machine breaks the small clods and firms the ground after each cultivation. While the drouth has cut down the plant of Apple Seedlings over 60% in the valley, the fields where we have used the packer show very little effect of the dry weather and seedlings have made a vigorous growth. Our expe-



rience this season demonstrates that Apple Seedlings can be grown without rain if the ground is worked right.

## F. W. WATSON & CO.

### Topeka, Kansas

APPLE AND PEAR SEEDLING SPECIALISTS

In writing to advertisers please mention The National Nurseryman

# The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

Vol. XXII. 1913

ROCHESTER, N. Y., OCTOBER, 1913

No. 10

## GINKGO BILOBA

The *Ginkgo biloba*, or *Salisburia adiantifolia*, commonly known as the Maidenhair Tree, is no longer a rare tree in the Eastern United States, at the same time it is comparatively unknown to many who really take an interest in trees. It is in fairly good demand among the eastern trade and would become much more so if it were more talked about and demonstrated by the retailers.

It is a tree that is so distinct and so alone in its appearance that there is no substitute for it. When the landscape gardener wants it for a certain position he wants it because there is nothing else that will do.

As to its merits, the writer has watched it for fully twenty years under all conditions and as an ornamental tree does not know of a single demerit that can be truthfully used against it, except the objection to the fruit.

While it is a tree that cannot be used in place of such as the Maple or be as generally used, it could be very liberally planted to the great advantage of our streets, avenues, parks and lawns, and it is suitable for them all, that have such a tendency towards monotony.

According to the late Thomas Meehan it is a type of tree that has come down from prehistoric times unchanged from its ancient form. The fossils found in rocks from the carboniferous period show the tree identical with its present form. In botanical classification it is placed among the conifers. It is a monotypic genus, having only one species. It comes in between the coniferous and deciduous trees, and may be considered as a connecting link as it were or a conifer with deciduous leaves. Those who have handled it in the nursery have doubtless noted the tendency to grow very symmetrical, with an outline similar to the Lombardy Poplar, but it is just as likely to send a branch at right angles. In matured specimens it is difficult to decide which is the most picturesque, trees having branches at all angles as it were, giving an open spreading tree, or those that grow very symmetrical and close. The branching habit has given rise to a considerable controversy as to whether there are two distinct forms or not.

There are several recognized forms or variations to be met with in Europe, *pendula*, a weeping one, *laciniata*, with a deeply indented margin to the leaves and a variegated one.

It is a native of northern China but is only found under cultivation so that maybe its continued existence is due to the care of the Chinese horticulturist for so many centuries.

It is hardy in most of the eastern states of America as far north as the Gulf of St. Lawrence and even parts of Canada. It grows luxuriously in the latitude of Philadelphia and south and has been freely planted in Washington, D. C., as a street tree.

By many it is considered one of the best of street trees owing to its smoke and gas resisting qualities.

Being dioecious, that is having the male and female flowers on separate trees, the objection to fruiting trees can be remedied by grafting trees in the nursery from trees of the staminate form, but so far the nurseryman finds ready sale for all he can grow regardless of sex.

The first Maidenhair trees that were introduced into the United States early in the last century were said to be all female. Later seed was procured by the Botanic Gardens at Washington; when they grew up there were a number of male trees among them. One of these was brought to Philadelphia and planted in Woodlawn Cemetery and it is claimed pollenized the trees fully ten miles away (in Germantown), as there were no mature male trees there at that time.

Seed should be sown in spring and readily germinates invariably producing a good stand. The seedlings may be left in the beds two or three years and then transplanted to the nursery rows.

### THE RAY PEACH

In point of sales of young trees, the Ray peach stands with us next to Elberta. We have 2,000 trees of this variety and they are loaded with fruit of the finest quality. They are bringing \$2.00 per Georgia carrier today f. o. b. shipping station.



THE RAY PEACH IS STRONG GROWING AND SYMMETRICAL





GINGKO BILOBA. MAIDENHAIR TREE.



It ripens Aug. 10-25. Ripening extends over a period half again as long as most varieties cover. Fruit white, with a good sized and most attractive red blush of delicate shade. Flesh white, with no stain at the stone; firm, of the most excellent quality, juicy, delicious, tender and keeps well. An excellent shipper, of fine appearance, even after much handling. Trees exceedingly strong growers, shapely and symmetrical. Old Peach orchardists would be surprised to see how quickly they attain good size. A regular bearer of big crops. Beyond a doubt, Ray is in a class by itself, over a very large range of territory and conditions. It has been tested thoroughly, as growers in the Eastern, Central and Western States have large numbers of Ray trees. We have thousands of bearing trees in our own orchards here in Berlin and elsewhere in Maryland, and West Virginia and our experience with these trees makes us all the more sure of our position in recommending it. This shows, too, an unbounded confidence in the commercial qualities of this peach.

Berlin, Md.

J. G. HARRISON &amp; SONS

## THE NEW TARIFF LAW COMPARED WITH THE OLD

PLANTS, BULBS, ETC.	Old Law	New Law
Orchids, palms, Azalea Indica, and all other decorative greenhouse plants and cut flowers, preserved or fresh.....	25 per cent ad valorem	25 per cent ad valorem
Lily of the valley pips, tulip, narcissus, begonia, and gloxinia bulbs.....	\$ 1.00 per 1,000	\$ 1.00 per 1,000
Hyacinth bulbs, astible, dielytra, and lily of the valley clumps...	2.50 per 1,000	2.50 per 1,000
Lily bulbs and calla bulbs or corms.....	5.00 per 1,000	5.00 per 1,000
Herbaceous peony, Iris Kaempferi or Germanica, canna, dahlia, and amaryllis bulbs....	10.00 per 1,000	10.00 per 1,000
All other bulbs, roots, root stock, corms and tubers, which are cultivated for their flowers or foliage.....	.50 per 1,000	.50 per 1,000
Stocks, cuttings or seedlings of Myrobalan plum, Mahaleb or Mazzard cherry, manetti multiflora and briar rose, Rosa rugosa, three years old or less...	1.00 per 1,000	1.00 per 1,000
Stocks, cuttings, or seedlings of pear, apple, quince and the Saint Julien plum, three years old or less.....	2.00 per 1,000	1.00 per 1,000
Rose plants, budded, grafted or grown on their own roots.....	4 cents each	4 cents each
Stocks, cuttings, and seedlings of all fruit and ornamental trees, deciduous and evergreen shrubs, and vines, and all trees, shrubs, plants, and vines, commonly known as nursery stock, not specially provided for in this section.....	25 per cent ad valorem	15 per cent ad valorem

## THE NEEDS OF THE LANDSCAPE ARCHITECT

By WARREN H. MANNING, Landscape Designer, Boston, Mass.

Plans of a necessity are usually made to include stock that nurseries offer or that can be collected. I find the most

difficulty in procuring good specimen shrubs and trees of large size.

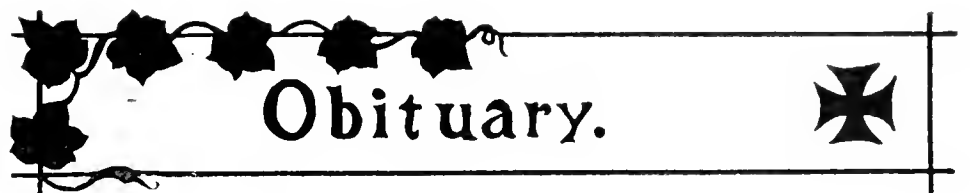
With evergreens I prefer those grown more open and natural. Bushy sheared evergreens are only needed in formal work and then must be very symmetrical.

Low growing evergreen shrubs should receive more attention from the nurserymen.

In general my suggestion is that nurserymen give more room to plants and arrange them so that they can be cultivated both ways. Many times they could get the same number of plants on the acre by making the rows a little narrower and providing for the removal of every other plant as they begin to crowd. In this way broad spreading specimens could be secured in the place of specimens that are thin on two sides owing to crowding in the rows. Such plants would better meet the requirements of landscape men and I believe the majority of such men would be glad to pay a higher price.

Yours very truly,

WARREN H. MANNING.



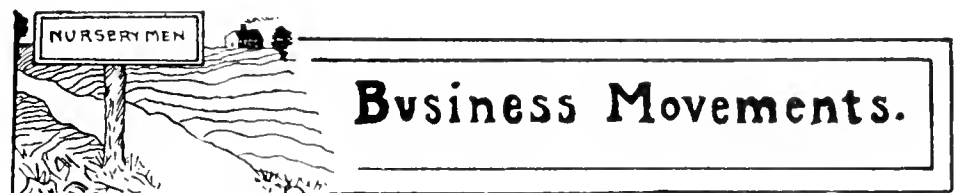
## WILLIAM HENRY MAULE

William Henry Maule, the well known seedsman of Philadelphia died on Wednesday, September 3d, from a stroke of apoplexy. Age 56 years.

Mr. Maule was one of the best known seedsmen in the United States, having built up an immense business in the last 35 years.

The seed trade has met with distinct loss in his death. He will be sadly missed by seedsmen and allied trades.

He leaves a widow and two daughters, Mrs. C. M. P. Herring of Philadelphia and Miss Ethel Maule.



## THE SUNNYFIELD NURSERY CO.

The Sunnyfield Nursery Co., Poughkeepsie, N. Y., has gone into bankruptcy and C. W. H. Arnold has been appointed as referee. The first meeting of the creditors was held in the office of Mr. Arnold, 56 Market Street, Poughkeepsie, New York, on the 10th of September when the creditors proved their claims and were given the opportunity to appoint a trustee to examine the bankrupt and transact other business pertaining to same.

The company was an incorporated one, Frank B. Lown, president; P. N. Mitchell, secretary; Albert Tersteeg, manager. The company was engaged in both the Wholesale and Retail Nursery business and also practiced Landscape Gardening.



Section of a Block of One Year Budded Peach, Containing a Half Million Trees, Photographed in July. Note Magnificent Growth.  
Westminster Nursery, Westminster, Md.

## REPORT OF TRADE CONDITIONS FROM PROMINENT NURSERYMEN

The only fall business which we have is in the bulb line and a small amount of business in the herbaceous. Spring delivery seems to give better satisfaction in this part of the country than fall delivery.

The drouth this year has caused our trees to be a little short in height but they more than offset that by having a stronger root growth and well developed body. The greatest amount of injury was done to seedlings owing to the fact that they are shallow rooted.

Yours truly,

York, Neb.

HARRISON NURSERY CO.

As to conditions in this section, would state that in spite of the longest drouth this section has experienced since we have been familiar with it (some 23 years) nursery stock generally has made up well. The drouth began in June, since then we have had occasional showers, and with constant cultivation have kept the growth up nicely. In fact roses are unusually good, cherry trees better than for many years, and all fruit trees, both one and two-year are very nice except apple which are light particularly in one-year olds.

June budded peach will not make up largely to 3 feet and up grades, but the 2 to 3 feet and 18 to 24 inch trees promise to be unusually stocky and nice. Quite a lot of young tender stock of last spring's planting has suffered, particularly evergreens and tender deciduous plants. All peach, pear and cherry seedlings, dormant budded, are in first-class

condition, and the stand of buds throughout the Huntsville district is generally good. As to prospects for business, would say that while the summer inquiries have been slow, they are now picking up rapidly and we believe the nurserymen of this section will have a good fall business, and we are hopeful.

Yours very truly,

Chase, Ala.

CHASE NURSERY COMPANY.

We have your inquiry of recent date relative to business and the growing season. We have no reason to complain; our stock with very few exceptions has made a good growth and the dry weather which affected a good many other parts of the country did not affect us, as we had continual showers throughout the season keeping the ground in a moist condition and along with good cultivation, stock grew in fine shape. Our block of apples the early part of the season we thought we would have to carry over another year. But they have made such a good growth they will count 80 per cent No. 1 and our one-year apple block we never had a better one and is about the same with our other lines of fruit.

As to trade in our retail line that has been fully 25 per cent over last year. With apparently not as much effort to get it. Our wholesale business, however, is what we call flat. Some difference from the previous season, but we do not feel but that before the spring season closes we will have the usual demand.

Manchester, Conn.

Very truly yours,

C. R. BURR & Co.



We do mostly a retail agency business, which is done in Virginia, Maryland, West Virginia, Tennessee, Kentucky, North and South Carolina, Georgia, Alabama and Mississippi.

Our sales for fall have been very satisfactory though not quite as much as for fall 1912 which were the largest sales we have ever had, though there was practically no profit in the year's business, as we sold too many apples and over sold on varieties that we had to buy at too high prices to make anything at the prices we were selling at. This season we increased our prices on apple which was against the opinion of some of our salesmen, especially as they had been selling in competition with other nurseries during 1912 and who were selling at lower prices than we were—and we found it harder to get men to sell at our prices and we lost a good many of our old men, but those that sold and the new men made a better weekly average than for 1912.

During fall of 1911 and spring and the early summer of 1912 there was a big demand in the commercial section of Virginia for apple trees of the following varieties, in order as follows: Wine Sap, Stayman Wine Sap, Mammoth Black Twig, York Imperial, Rome Beauty, but the very heavy and indifferent crop of summer, fall and winter apples of 1912 caused very low market for fall 1912 and winter of 1913 which had the tendency to discourage those that planted for market—and it also had the effect of causing a good many nurserymen to become "weak kneed" especially the northern wholesalers who offered their stock at a very low figure and the wholesale prices at this time are not more than one-half of what it was this time a year ago.

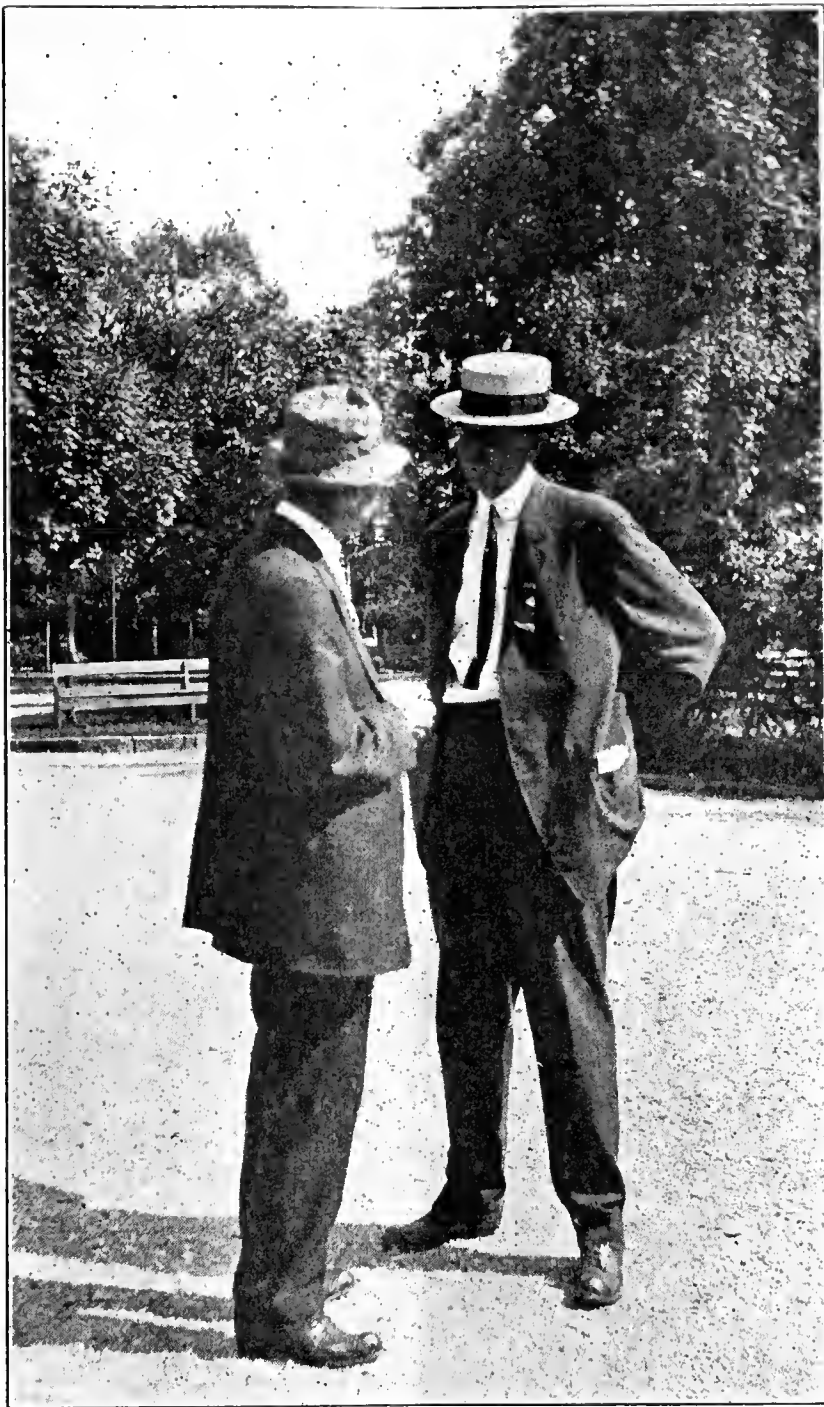
Our sales are made up of a large lot of small orders and make a very long list of varieties some 750 or more which include large and small fruits and ornamentals. Of apples we are selling a great many of the early varieties—for early, Early Harvest, 1st: Yellow Transparent, Early Ripe, Carolina Red June, and Horse. Late summer and fall: Bonum, Buckingham, Summer Rambo, Grimes, Smokehouse and Fall Pippin. Winter: 1st Stayman's Wine Sap, Wine Sap, Mammoth Black Twig, Rome Beauty, York Imperial, Ben Davis, Gano, Lowry and Newton or Albemarle Pippin. Up to this year Wine Sap has been our leader

followed very close by York Imperial, but York Imperial has fallen down to fifth place and sales only about one-fifth of what they have been the past several years; it is a variety that has been very heavily planted by nurserymen for several years and I think there will be some large bonfires of this variety—we have nearly 100,000 growing ourselves.

We find no trouble to buy any varieties of apple this season except some varieties that other nurserymen do not grow. Of pears Kieffer leads followed by Bartlett and Seckel; we grow most all we sell and will not have much surplus for trade; think prices a little firmer than last year on Kieffer. Of plum, we sell mostly of the Japan varieties and Shropshire Damson—have no surplus except Shropshire—from inquiries the Japans are scarcer than last season. Cherries—we sell about even of sweets and sour think have plenty for our own orders and will have light surplus of sour for trade, not near as large stock as last season.

Peach—we are short a few of early varieties and will have some surplus of some varieties; price is lower than this time last year. Small fruits we have sold about our usual quantity. Strawberries have not done as well as we would like to see them, though much better than last season, though we tried not to make large sales of them we have sold about as many as usual—think have sold less of shade trees and ornamentals than last season. Norway Maple is our leader, of which we have plenty for our sales, and as we have been importing the 6 to 8 feet sizes for several years we have much better trees than when we bought the small size one and two-year seedlings. We sell very few herbaceous plants.

Most all of our stock has done well this season. During early spring we had a good deal of trouble with insects, Black Aphis on peach buds and some Green Aphis on apple. The Black Aphis did a great deal of harm before we got rid of them as we were busy with spring shipping and neglected them for a week or ten days. After spraying with Black Leaf 40 we did not have much more trouble. Our apple trees have made an unusual growth and still growing at this time and our only fear is that they will not be in condition to dig as soon as we would like to commence.



AN ARGUMENT ABOUT THE LAST SHIPMENT.  
C. M. Jordan, Keithville, La., at the right.  
Southern Nurserymen's Convention





Block of coming two-year apple containing over 100,000 trees. Excellent growth. Westminster, Md.

After the Southern Nurserymen's meeting at Mont Eagle, Tenn., I visited the nurseries at Winchester and Huntsville and while the season had been very dry and had told on farm crops the nurseries did not seem to suffer except will make more small sizes of peach; also the June bud peaches were not as large as I have seen on former visits. The Winchester and Huntsville Nurseries are growing lots of nice stock—Winchester very heavy in apple, and there will be plenty of them one year from now and it looks to me as if they will have plenty of them to burn, especially Jonathan which seems to be their leader, and while it is one of the fine apples the commercial planters of Virginia want very few of them. The Huntsville and Chase Nurseries were in "apple pie" order, everything looking nice, the standard pears especially, both one and two year; the dry summer had suited them and they made fine growth not a leaf shed which were very large and as green as they were in early summer. The Chases are growing lots of ornamentals and it looks as if they want to have a corner in Altheas, Roses and *Spiraeas* these three varieties alone would make a large nursery. In one block of running roses I think they said there was over 40,000 Dorothy Perkins.

Our own planting for the past two years has been much heavier than usual, especially in apples and we had very good success in securing good stands; we also had a very good size budding especially peach and think we have a good stand of buds as we are about finishing up now.

Have about all our boxes made for fall business and hope when the time comes to dig will be able to push through in good time.

Richmond, Va.

Very truly,

W. T. HOOD & CO.

Without answering your questions in detail, we will state that the growing season here has been very good indeed.

We have sold very close on Peach.

Have fine lots of leading kinds of Apple for commercial orchards in one year trees, as good as ever grew, in our judgment. All stock has made very satisfactory growth.

Our trade so far this year has been about an average, and we think we will have very good fall trade, though we see nothing to warrant an overly optimistic view.

Yours very truly,

Pomona, N. C.

J. VAN LINDLEY NURSERY CO.

Fall planting of nursery stock is very light compared with spring business and I do not believe our fall business will vary \$500 from one year to the other.

Most blocks of apple trees through New York State have made a very fair growth but I do not believe that there are many blocks that will grade over 50 per cent first-class trees. Most all varieties of apples seem to be in surplus this fall and the trade seems to be entirely demoralized amongst the growers; each grower trying to cut the other man's throat to get an order. Our leading varieties in apples are Baldwin, McIntosh, Rome Beauty, Wealthy and Duchess.

There are only a few blocks of good pear trees in this state and the blocks will not average 40 per cent first-class trees. I do not think that there will be many varieties of pears in surplus outside of Kieffer. Our leading varieties of pears are Bartlett, Clapp's and Seckel.

Plum trees will not grade up nearly as well as they have in other years and I do not believe there will be many varieties in surplus.



One of Florida's Products—C. F. Barber, McClenny, Fla.  
Southern Nurserymen's Convention

Cherry trees are making up better than they have in several years and they will run very heavily to the first grade and I do not believe there will be many left in surplus. Sweet cherry trees seem to be quite scarce at the present time.

Peach trees are as plentiful as apples but they have made, on an average a very poor growth in this state. There are very few blocks of good peaches, most of them will run mostly to the second and third grades. I do not know any varieties that are short. All varieties seem to be in big surplus the same as apples.

There seems to be a larger demand each year for small fruits, and this year, it looks as though small fruit stock will be scarce owing to the extremely dry season we have had and I am looking for all varieties being short more or less.

Yours truly,

Rochester, N. Y.

ALLEN L. WOOD.

Our business at this date for next fall and spring delivery, has been quite satisfactory, being only a few hundred dollars behind what it was last year.

We have had an unprecedented drought and excessively hot weather throughout the west, during the past two months; but with the advent of our usual fall rains, we think the farmers will soon forget their troubles, and the usual amount of business will be "rolled up" by April first.

The growing nursery stock has done reasonably well, and there seems to be a sufficient supply to meet the demands of our western trade.

We are somewhat long on apples and peaches, but think that everything will be cleaned out by the close of the season.

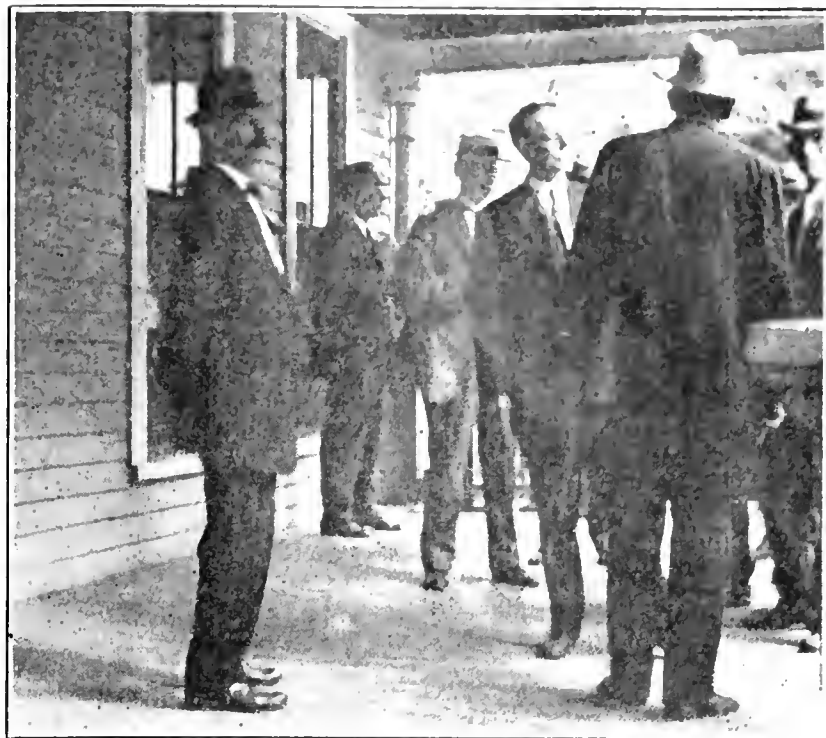
There is a strong demand for cherries, grapes, plums, and pears, which would indicate that there is not an over supply of this stock.

The temperature has moderated greatly during the past two days, and our usual fall rains are beginning now to put in appearance. We feel that business will be "booming" along at its usual pace within the next thirty days.

Yours truly,

Des Moines, Iowa.

DES MOINES NUR. CO.



R. C. Berkman, E. W. Chatten and Harvey Templeton "lining 'em up" for the Order of the Yellow Dog.  
Southern Nurserymen's Convention

Our nursery stock has made a very satisfactory growth this season, though not as luxuriant as some seasons, owing to the continued dry weather from June until the last of August. Abundant rains since then have brought soil conditions to normal again.

We have every reason to believe that the fall from now on until freezing weather will be a most active one with us. In fact, if we take no more orders than are now on our books we will have every reason to feel satisfied.

The problem with us now is, how to get enough efficient help to attend to orders, especially in our Landscape Department. The better class of the buying public are certainly becoming very critical and capable of distinguishing good landscape work from the other kind, and if concerns in this line of business expect to continue they must be equipped to *deliver the goods*, in all that this implies.

Very truly yours,

New Haven, Conn.

THE ELM CITY NURSERY CO.

The Pacific Northwest has had rather more than its usual quota of rains this summer, and crops generally, including fruits, are excellent.

Business in the nursery line did not start off so early as usual, but as nearly all kinds of fruit, both green and cured are bringing good prices we expect a good trade before the season is over.

Nursery stock is generally in good condition, with a prospect that it will be pretty well cleaned up except in Apple and Italian prune, of which there is likely to be some surplus.

Very truly yours,

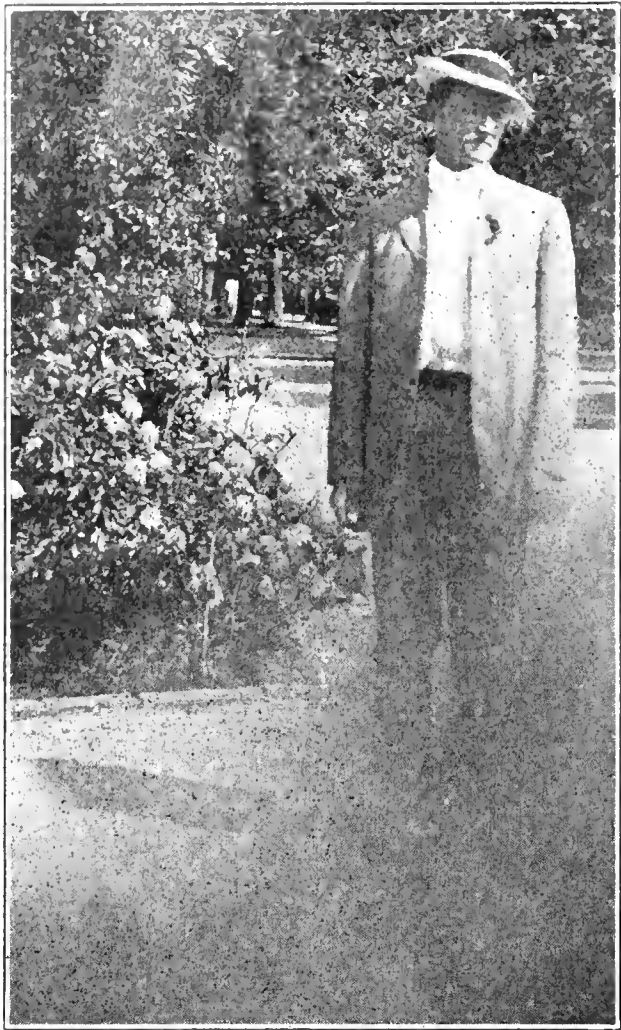
Portland, Ore.

ALBERT BROWNELL.

The ornamental stock has made a good stocky growth the past summer and the prospects for fall business are good. There is a good demand in this locality for the plants, largely for evergreens.

The demand for herbaceous plants is increasing. The





O. Joe Howard, Pomona, N. C., President, 1912-13  
Southern Nurserymen's Convention

demand is general, Paeonies, Phlox and Iris seeming to take the lead.

Elizabeth, N. J. ELIZABETH NURSERY COMPANY.

The past season has been an exceptionally favorable one for ornamental stock, with thrifty, sturdy growth. A brisk demand and a constant inquiry speak well for a busy fall season. The demand for plants is constantly growing in this locality.

The demand for herbaceous plants is increasing and we have been hard pressed to meet it. Iris, Phlox and Peonies seemingly being the most called for.

The wonderful development of home and municipal beautification by judicious planting of ornamentals is increasing property values and promoting home-pride and comforts country wide.

Very truly yours,  
Biltmore, N. C. BILTMORE NURSERIES.

The ornamental stock has made a very good growth considering the very dry weather we have had. We do not do very much in this line of stock.

With apples the prospects for fall business are good, considering. They will grade light and we shall carry Rome Beauty as a leader.

With the pear trees the prospects for fall business are normal. They will grade very good, with Kciffer as our leader.

With plum trees the prospects for fall business are slow. They will grade very good and we shall carry as our leaders Moore's Arctic and Shipper's Pride.

With cherry trees the prospects for fall business are good and the trees will grade very good. The leaders we shall

have are Early Richmond, English Morello and Montmorency.

With peach trees the prospects for fall business are very good and the trees will grade light. Our leader will be the Elberta.

The stock of small fruits we think is up to the standard of former years, Red Raspberry being in the greatest demand.

All through the fruit stock there will be some varieties short and some in surplus.

Very truly yours,  
Moscow, Ohio. ERNST NURSERIES.

The prospects for fall business in apples are fair and the trees will grade good. There will be a surplus of Yellow Transparent and William's Early Red will be short. Our leaders will be Yellow Transparent, William's Early Red and Stayman's Winesap.

The prospects for fall business in peaches are the best in years, though the trees will mostly be in the smaller sizes. The stock of Elberta will be in surplus and the Belle of Georgia, Francis and Denton will be short. Our leaders will be Elberta, Carman and Belle of Georgia.

The stock of small fruits will be up to the standard of former years, the greatest demand being for the St. Regis Red Raspberry and Eldorado Blackberry.

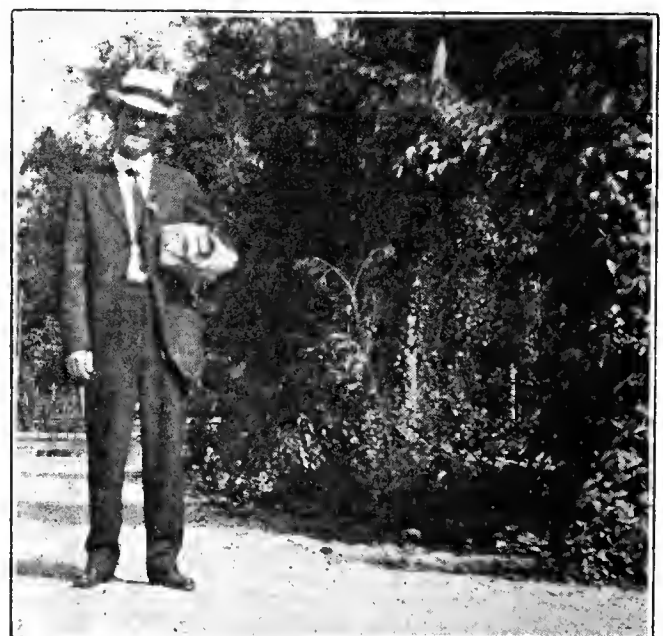
Bridgeville, Delaware. MYERS SONS.

Considering the very dry summer the growth made by ornamental stock has been very good, and the prospects for fall business are excellent. The demand in this locality is very good.

The demand for herbaceous stock is increasing, perennial Phlox, Paeonies, Delphinium, Foxglove, etc., being in most demand.

At the Connecticut Fair, which has just closed its most successful show, we exhibited our collection of evergreens, shrubs and perennial Phlox, for which we received first prize on each.

Very truly yours,  
Hartford, Conn. W. W. HUNT & Co.



Southern Nurserymen's Association  
A. I. Smith, Secretary, Knoxville, Tenn.  
"I'm glad you are such a good fellow"



The prospects for fall business in apple trees are fair and the trees will grade good. Our leaders will be Duchesse, Wealthy, Okabena, Jewells Winter and Greenings.

In pear trees the prospects are average and the trees will grade good. Our leaders will be Keiffer, Bartlett, and Flemish Beauty.

In plum trees the prospects for fall business are good and the trees will grade good. The supply is perhaps a little smaller than usual. Our leaders will be Americana and Chickasaw varieties. Compass Cherry-Plum, Hansen Hybrids.

gardens and use heavily of ornamentals of all kinds. Considerable municipal plantings are being done.

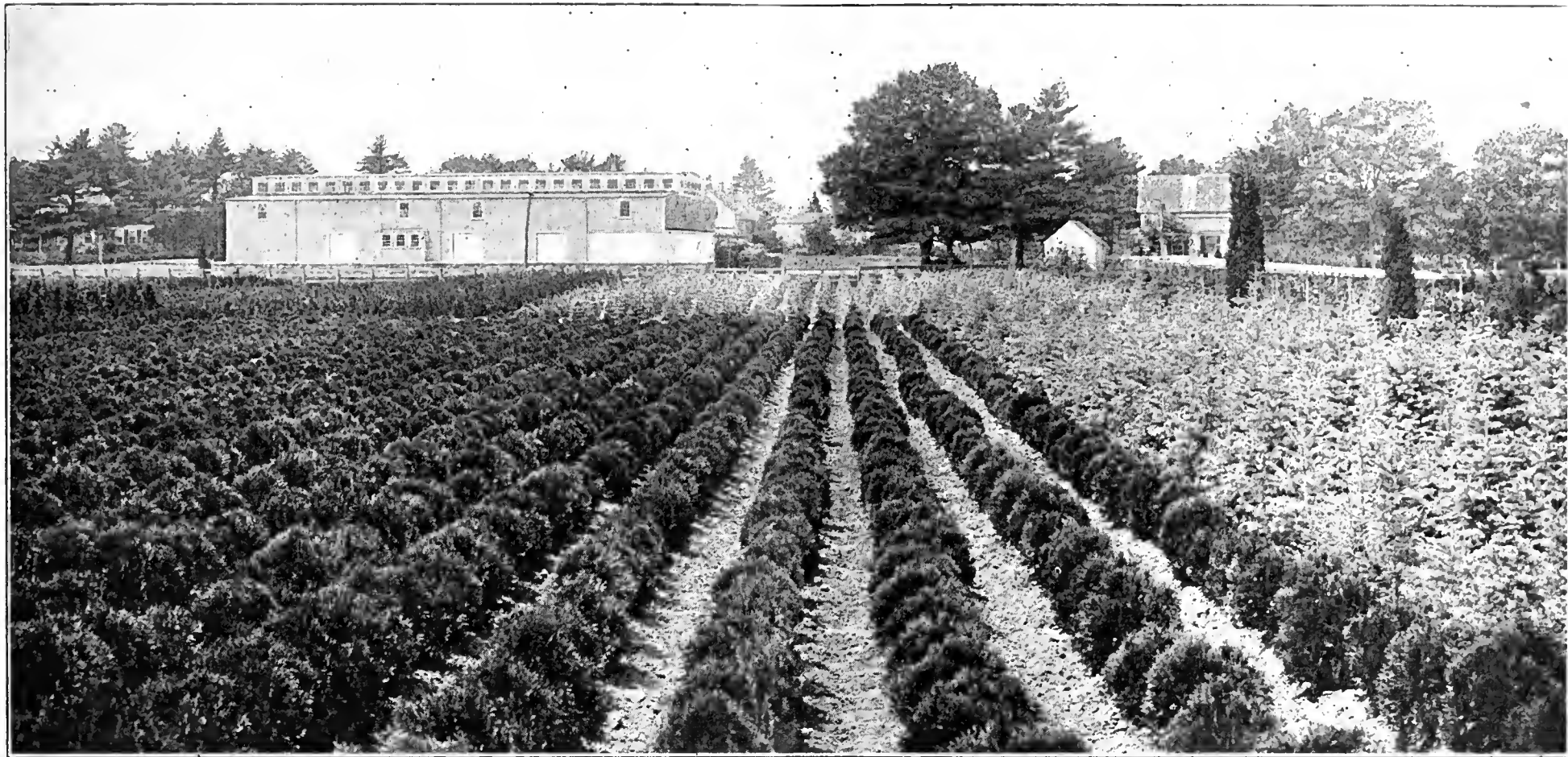
Lake City, Minn.

Very truly yours,

THE JEWELL NURSERY CO.

Owing to the drought the apple trees will grade fifty per cent lighter than usual. Some varieties will be short but we shall have a surplus of Stayman's Winesap, Jonathan and Rome Beauty and these we shall carry as our leaders.

Pear trees will also run 50 per cent lighter than usual. Our leaders in these will be Keiffer and Garber.



"A partial view of the Bay State Nurseries, North Abington, Mass., showing evergreens that have been several times transplanted. Also a view of their new packing house, with railroad siding."

In cherry trees the prospects are about the average and the trees will grade good. We have a fair supply of Sour Cherry, but may be short on the sweet varieties. Our leaders will be Early Richmond and Montmorency.

The stock of small fruits is up to the standard of former years, the greatest demand being for currants and gooseberries. There seems to be a fair supply of all kinds.

The past season has been a good growing one and business conditions are satisfactory.

Ornamental stock has made a very satisfactory growth the past summer and the prospects for fall business are very good. There is a good demand in this locality for this class of stock.

The demand for herbaceous stock is increasing, the heaviest being Paeonies, Phlox and Iris.

Commercial orchard planting, we believe has very perceptibly decreased. A seemingly diminished demand for fruit stock in the older farming communities has been offset by demand for ornamentals and windbreaks. Town and city demand quite a quantity of fruit stock for back yard

Plum trees will also run much lighter than usual and some varieties will be in surplus and others short. Of these we shall use the Japan varieties as our leaders.

Some varieties of cherries will be short and others in surplus. Of the cherries we shall have Early Richmond and Montmorency as our specials.

Many more of the peach trees will be in lighter grades than usual. Of these we shall have Elberta, Carman and Crawford for specials.

The stock of small fruits is not up to the standard of former years. There are no varieties in surplus and some varieties will be short.

With no rain since July 4th and less than two inches since April 5th we are waiting for moisture.

New Haven, Mo.

Very truly yours,

NEW HAVEN NURSERIES.

The demand in apple trees this fall will be light. They will grade largely one-half to five-eighths and five-eighths to eleven-sixteenths.

(Continued on page 394)

# The National Nurseryman

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It circulates throughout the United States, Canada and Europe.

Official Journal of American Association of Nurserymen

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

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Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Address, Editor, Flourtown, Pa.

STATEMENT OF OWNERSHIP, MANAGEMENT, CIRCULATION, etc., of  
THE NATIONAL NURSERYMAN, published monthly at Rochester, N. Y., as  
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Editor, Ernest Hemming, Flourtown, Penn.; Business Manager, Thomas B. Meehan, Dresher, Penn.; Publisher, National Nurseryman Publishing Co., Inc., Rochester, N. Y. Owners: Stockholders, Mrs. C. L. Yates, Claverhouse, N. Y.; James McHutchison, New York; Thomas B. Meehan, Dresher, Penn.; Albert F. Meehan, Dresher, Penn. No bonds, mortgages, or other securities.

THOMAS B. MEEHAN, Bus. Mgr.

Sworn to and subscribed before me this 18th day of September, 1913.

VICTOR PAUL, Notary Public.

(My commission expires January 21, 1915.)

Entered in the Post Office at Rochester, N. Y., as second-class matter.

ROCHESTER, N. Y., OCTOBER, 1913.

## AMERICAN ASSOCIATION OF NURSERYMEN

PRESIDENT—J. B. Pilkington, Portland, Ore.; Vice-President, Henry B. Chase, Chase, Ala.; Secretary, John Hall, Rochester, N. Y.; Treasurer, Peter Youngers, Geneva, Neb.

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LEGISLATION WEST OF MISSISSIPPI RIVER—Peter Youngers, Geneva, Nebr.

CO-OPERATION WITH ENTOMOLOGISTS—L. A. Berckmans, Augusta, Ga.

PROGRAM—John Watson, Newark, N. Y.

EXHIBITS—

ARRANGEMENTS—

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ROOT KNOT—E. A. Smith, Lake City, Minn.

MEMBERSHIP—State Vice-Presidents.

## STATE AND DISTRICT ASSOCIATIONS.

American Nurserymen's Protective Association—President, Henry B. Chase, Chase, Ala., secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.

American Retail Nurserymen's Protective Association—President, H. W. Marshall, Arlington, Nebraska; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.

Association of Oklahoma Nurserymen—President, J. A. Lopeman, Enid, Oklahoma; secretary, C. E. Garee, Noble, Oklahoma.

California Association of Nurserymen—President, Frank H. Wilson, Fresno, Cal. Secretary, H. W. Kruckeberg, Los Angeles, Cal.

Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.

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Eastern Association of Nurserymen—President, Wm. C. Barry, Rochester, N. Y.; secretary-treasurer, William Pitkin, Rochester, N. Y. Meets annually in January.

Idaho Nurserymen's Association—President, Anton Diedricksen, Payette, Idaho; secretary, J. F. Litooy, Boise, Idaho.

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National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.

New York State Nurserymen's Association—President, E. S. Osborne, Rochester, N. Y.; secretary, John Watson, Newark, N. Y.

Ohio Nurserymen's Association—President, W. N. Scarff, New Carlisle, O.; secretary, W. B. Cole, Painesville, O.

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Pennsylvania Nurserymen's Association—President, Abner Hoopes, West Chester, Pa. secretary, Henry T. Moon, Morrisville, Pa.

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Western Association of Nurserymen—President, Frank A. Weber, Nursery, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

## MODERN METHODS

Applied to a nursery modern methods are perhaps not so modern in our business as they are in factories and other lines that are brought right up to the minute. Yet it appears at times as if they were too modern even in nurseries in production, storage and distribution in some of the large establishments.

Efficiency in production and distribution has been built up at a sacrifice of vigor and quality of stock.

We cannot get away from the fact that plants are more like animals than a manufactured article. They have an individuality of their own and if we commercialize them too much we lose something.

A short time ago Antoine Wintzer wrote of the loss of vitality in Roses through propagating from forced or weak wood and this tendency is very general with all lines of stock that are propagated in great quantities.

High pressure production is not conducive to vigor, disease resisting qualities and long life.

It is the same with plant breeding, what we gain in fineness and quality is generally at the expense of vigor and hardiness.

Nature's laws are absolute and she will not brook having them flouted without exacting a penalty.

We may think at times we have forced Nature to give us more than she is wont by stimulating with manures, artificial irrigation, using strong growing stock upon which to graft, or growing in warmer or more moist climates than is natural to the plant, but as sure as the growth is in excess of what it should be, the tissue will be soft and the plants will have lost something equal to what they have gained in caliper and height.

Some will consider a heavy crop of Apples or Pears on a six or seven year old orchard a greater success than an orchard which will continue bearing for fifty years or more. You are hardly likely to get both so it is up to the nurseryman and orchardist to choose, but don't blame the scale, blight, or fungus for what is caused by lack of true horticultural knowledge.

Modern methods are splendid methods when applied under the laws of Nature, but don't let us get the idea that we can break Mother Nature's laws without getting spanked.

## WHILE A TREE IS OUT OF THE GROUND

The main roots of a tree are merely to anchor it in the ground and to act as carriers to the leaves, in fact they stand in relatively the same position as do the branches.

The really essential parts of the root system are the fibrils. These correspond to the twigs on the branches. On these fibrils are the root hairs which have the power to take in the necessary plant food in solution, which is carried through the main roots up the cambium layers under the bark of the trunk, branches and twigs to the buds and leaves, where it is exposed to the action of the sun's rays and is transformed into the building tissues of the plant.

What happens when we dig our trees? The root hairs are killed by exposure to the air even for a few minutes, the fibrils by exposure a few hours and under some conditions the

main roots are so dried as to make it hard for them to produce new fibrils.

With these fundamentals in mind, when we think of how trees are often handled when out of the ground, is it any wonder they are failures or that trees take such a long time to recover after planting?

The readiness with which many of the soft-wooded trees make new roots, such as the Poplars, Willows, Peach, Apple, etc., has led to the abuse of trees when out of the ground. Trees with the roots dried out are little more than big cuttings that have to make an entirely new root system before they can grow. This they will often do if conditions are favorable.

But take the hard-wooded trees, such as Oak, Beech, Dogwood, Birch, and such as do not make new roots freely, and it means failure, often under the most favorable growing conditions after planting.

The preservation of roots while the trees are out of the ground, be it on the nursery waiting to be loaded, in cellar, packing shed, or in box, bale or wagon going to the customer, is one of the very important problems that the nurseryman has not yet mastered or at least not to the extent that it should be.

A tree properly handled should not know that it has been moved and should make nearly as much growth as if it had been left in the ground undisturbed.

**TRADE MARK** Every right thinking nurseryman will endorse the decision of the Missouri-Courts recognizing the validity of Trade Marked varieties of fruits as made in favor of Stark Bros. Nurseries and Orchards Company.

After a nurseryman has spent money, labor and brains to produce something new or improved over the old order of things and then money to advertise it, it seems quite right that he should be entitled to the harvest if there is any.

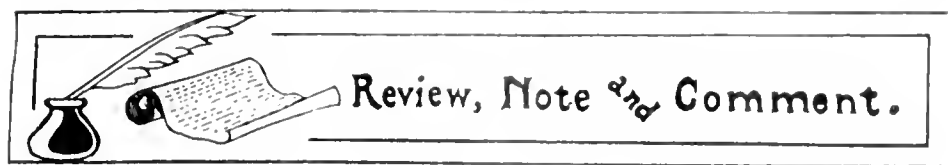
Up to the present the horticultural world has been a free for all and a man's life work could be taken away from him without so much as "by your leave."

Horticulturists, like the physicians, have been grouped as human benefactors, the world has frowned on any attempt to restrict or reserve to themselves discoveries or inventions in their professions.

**THE FORECAST OF FALL TRADE** The NATIONAL NURSERYMAN prints in this issue reports from nurserymen in all sections on trade prospects and the supply of stock for this year. These reports make an interesting and instructive study and are worthy of the deepest consideration by nurserymen.

It is generally conceded that there is a large surplus of Apple, Peach and Keiffer Pear and unless there is a marked improvement in the demand for these, the "bonfires" next June will be even larger than they were this.

When will nurserymen realize that it is suicidal to double their plantings just because the sales of one year exceeded those of the previous one? Better by far go short and have to buy a few trees to fill orders rather than to grow such excess quantities over the normal demand.



The Society for Horticultural Science will hold its annual meeting in Washington, D. C., November 20-21, 1913.

Fire recently destroyed the plant of the Spaulding Nursery & Orchard Company, at Sixth and Hickory streets, Springfield, Illinois. The damage is estimated at \$1,500.

### QUESTIONS CONCERNING COPYRIGHT

We note in NATIONAL NURSERYMAN an article relating to certain names being copyrighted by the Stark Company of Louisiana. We understand that the words "Stark Delicious" are the words that were copyrighted. That if they comply with the law in regard to the copyright, no one can use these two words and others which they have copyrighted, when applying to the name of an apple. But does this copyright extend to just the word "Delicious" itself, or to some other word used to precede the word "Delicious" like "Missouri Delicious" or "Minnesota Delicious," etc.

Further information upon this subject should be of interest to your readers.

E. A. S.

Perhaps Stark Bros. Nurseries & Orchards Company will enlighten us on this interesting subject.

EDITOR.

We have found your journal valuable as an advertising medium. We are on the market with the nicest lot of thrifty, choice young ornamentals in this country. Have had a fine growing season and everything is on the jump here.

Yours very truly,

ATLANTIC NURSERY CO., INC.,  
Per D. W. Babcock, Mgr.

Chas. A. Ilgenfritz and wife of Monroe, Mich., visited Rochester and other New York nursery centers the latter part of this month. They were combining business with pleasure and seemed to be taking their full share of the latter. They have many friends in Western New York.

"Rob" Chase, Huntsville, Ala., returned from his trip to Europe with "Ed" Welch of Shenandoah, Iowa. this month. "Rob" could not back into harness right away so incidentally spent some little time with the nurserymen in the Empire State. Evidently what "Rob" did not see in Europe was not worth wasting time on.

The Niagara County Nurseries, Wilson, N. Y., are building two houses and a barn on their nurseries at Wilson.



(Continued from page 391)

In pear trees the demand is not up to former years. The trees will grade as good as usual. There will be a surplus of Kieffer and we shall make Kieffer and Seckel our leaders.

The demand for plum trees will be good and the trees will be as good as usual. Our leaders will be Wild Goose, Burbank's and Damsons.

The demand for cherry trees will be good and the stock heavy. We shall carry as a leader the variety Montmorency.

The demand for peach trees will be fair and the trees will grade lighter than usual. The Elberta will be in surplus and we shall carry this and Carman, Heath Cl., Champion as our leaders.

surplus but the sweet varieties will be short. Our leaders will be Early Richmond and Montmorency.

In peaches the prospects for fall business are very good. The trees will be a splendid grade. Elberta, Bush, Smock and Crawford's will be in surplus.

Our sales are a little in advance of this date, 1912.

Ornamental stock has made a satisfactory growth the past summer and there will be a good strong demand this fall for plants in large lots. There is a good demand in this locality for shade trees and shrubs.

The ornamental trade appeared to be better than for the past few years.

Greenbrier, Tenn.

Very truly yours,  
THE GREENBRIER NURSERY CO.



Block of apple grafts on the nurseries of J. P. Skinner and Company, Topeka, Kansas, containing 200,000 in the following varieties: Rome Beauty, Grimes' Golden Pippin, Jonathan, Stayman's, Northern Spy, Fameuse, Florence, Transcendent, King, Early Harvest, Wine Sap, Wealthy, Duchess, York Imperial.

The stock of small fruits is not up to the standard of former years. The greatest demand will be for blackberries and gooseberries.

Ornamental stock has made a fairly satisfactory growth the past summer. The prospects for fall business are good and there is a good demand in this locality.

The demand for herbaceous stock is increasing in all varieties.

Trade in ornamentals is increasing, particularly in heavy stock for immediate effect.

St. Louis, Mo.

SOUTH ST. LOUIS NURSERIES.

The prospects for fall business in apple trees are about as last year. On account of the drought the trees will run to the five-eighths to eleven-sixteenths, a good per cent will be eleven-sixteenths and up. No varieties will be in surplus but some will be short. Our leaders will be York Imperial, Grimes, Rome Beauty, Stayman's.

In pear trees we shall only have enough to fill our mail orders. We shall be short on plums.

The prospects for fall business in cherries are good. The trees will grade good. There will be no varieties in

Regarding the forecast on the fruit tree conditions here in the west, I candidly admit that I am a poor forecaster. In the first place my business is principally growing ornamental stock and only in a limited way do I come in contact with the growers of fruit trees. In the extreme west, or I might say on the Pacific Coast we do not irrigate and are dependent upon moisture from up above. Think, however, the concensus of opinion is that stock has made a good growth and I know we will have a good supply, particularly in apples. Just east of us in what is known as the "East of the mountains" country, where irrigation is in practice, growers are not dependent upon rainfall and I know have had no serious setbacks and as a consequence stock should be good, and there is no doubt but what the supply will be adequate to all demands. I am afraid my advice along these lines cannot be considered authentic for the reason I mentioned that I am not in close enough touch with the growing end of the fruit business.

Yours very truly,

Portland, Ore.

J. B. PILKINGTON.

In reply to your inquiry regarding prospects for business, etc., will say that the prospect for fall business in fruit trees with us is about as usual, certainly no better. Fall trade is very light always compared with spring. The drought the past season has caused all stock to average a larger proportion in the lighter grades than usual, although the rains the past month have caused a rapid growth. We do not believe the demand for fruit trees will be as great for next fall and spring delivery as it has been for several years past, although it promises to be very good. The talk about apple trees being over planted has caused many intending planters to hesitate and the large crop and low prices of peaches the past season is having the same effect on intending peach tree planters.

Yours truly,

Yalesville, Conn. THE BARNES BROS. NURSERY CO.

We will have our usual supply of apple, pear, plum, cherry, and peach trees.

The prospect for fall business is much brighter than it was a month ago. While prices rule somewhat lower on apple and peach yet we find a good demand for the stock and the increased price of pear, plum, and cherry will make the average price as high as it was last season.

Cherry trees seem to have been a short crop, especially sweet varieties. European plums are also short and in good demand.

We trust this information covers what you want

Yours truly,

Danville, N. Y.

THE J. B. MOREY NURSERIES.

The prospects for fall business in apples are fair. The stock is a little under the usual grade owing to the extreme drought. Ben Davis, Winesap, Shackley and Arkansas Black will be in surplus, but no varieties will be short. Our leaders will be Arkansas Black, Ben Davis and Jonathan.

In pear trees the prospects are fair and the trees will grade three-fourths inch and up. The Kieffer will be in surplus and the Duchess and Seckel will be short. Our leaders will be Keiffer and Bartlett.

The prospects for fall business in plum trees are good and the trees will grade rather small. We shall have as our leaders Burbank, Wild Goose and Golden Beauty.

The prospects for fall business in cherry trees are dull but the trees will be a fine grade. Early Richmond and Montmorency will be in surplus and Governor Wood and Black Tartarian will be short. We shall carry as our leader the Early Richmond.

In peach trees the prospects for fall business are fair. The trees will grade rather small on account of the drought. We shall have as our leaders Elberta, Pomeroy, Morgan Winter, Black's September and Black's October.

The stock of small fruits is up to the grade of former years, the greatest demand being for blackberries, Lawton Dallas

We believe business will average up with former years.

In ornamentals the severe drought has cut the growth to some extent yet it is very good. The prospects for fall business is fairly good and the demand in this locality is good.

Mt. Pleasant, Texas.

VINE HILL NURSERY CO.

We have just mailed our catalogs, and have no line on the prospective demand for retail trade on either fruit or ornamental trees for the coming season.

So far, as wholesale trade is concerned, we think the demand for everything, especially in the fruit tree line is about even with last year, so far, outside of apple and peach.

Stock for this fall's sale, in two year blocks is looking nicely, but the dry weather has interfered with the growth of spring plantings.

So far as naming varieties that will be in surplus, of course, that depends entirely on the trade, and cannot even guess at anything of that kind yet. We anticipate that outside of peach and apple there will be but little surplus, and believe in ornamentals, especially shrubs, there will be a shortage before spring sales are over.

Yours truly,

Painesville, Ohio.

THE STORRS & HARRISON CO.

We can only judge by the impressions that our own trade brings, but indications are that our sales will not be quite up to normal for fall deliveries but will come fully up on spring sales.

We attribute this mainly to the tendency of farmers to avoid payment as long as possible, hence, order for spring.

Trade on apple, cherry, peach and shade trees at the present time show the strongest movement.

Yours respectfully,

THE WOLVERINE CO-OPERATIVE NURSERY CO., LTD.

Paw Paw, Mich.

Regarding your request for some statement as to the prospects for fall business, would say that at the present time our orders and prospects are fully as good as for any year recently.

Fruit is bringing good prices and it seems to be stimulating the demand, particularly for peach and apple, although prices for these items are considerably lower than those quoted a year ago at this time.

A great many varieties of ornamentals are positively scarce, and unless there should be a general set-back in business conditions, we look for a very active demand.

Very truly yours,

Geneva, N. Y.

W. & T. SMITH COMPANY.

We do not handle fruits but our neighbors report long on winter apples, short on summer apples and the usual supply and demand on other varieties.

The prospects for fall business in apples are fairly good and the stock also is fairly good.

In pears the prospects are fairly good and the trees will grade medium. Our leader will be the Keiffer pear.

Owing to the extreme drought we lost heavy in ornamental stock but what we saved has done well. Our orders are better than at this date last year. Our trade is in the wholesale.

The demand is increasing very fast in the last few years, especially in forest seedlings. The heaviest demand seems to be in shade trees and shrubs of all kinds. The demand for California Privet is much better than last year.

Owing to general continued drought forest seedlings and one year stock in general will be shorter than usual and demand is greater with us than ever before. We have already sold short on some varieties of seedlings.

Yours truly,  
McMinnville, Tenn. FOREST NURSERY & SEED CO.

The prospects for fall business in apple trees are about average. The trees will grade heavy in caliper, about average in height, in good healthy condition. Stock is pretty well balanced but we expect to have some Northwest Greening in surplus. We may be a little short on Yellow Transparent, Winesap and Janet. Our leaders will be Yellow Transparent, Duchess, Wealthy, Grimes' Golden, Jonathan, Winesap, Windsor, Salome, Gano, Northwest Greening.

We do not do much in pear trees. Our leaders in standards will be Flemish Beauty and Sheldon and in the dwarfs Louie Bon De Jersey and Duchess. In plum trees the prospects for fall business are good and the trees will be of a splendid grade. Our leaders will be Americans, i.e. Wyant, Wolf, Stoddard, etc.

The prospects for fall business in cherry trees are good and the trees will grade good and strong. A few varieties Early Richmond and Montmorency will be in surplus but we do not anticipate any varieties will be short. Our leaders will be early Richmond, Montmorency, English Morello, Terry and the Dukes.

We do not do much in peach trees but the stock is good.

The stock of small fruits is not up to the standard of former years except in currants and gooseberries when the stock is good. No varieties will be in surplus but there will be a shortage on strawberries and raspberries.

The stock of ornamentals has made a satisfactory growth this summer and the demand in this locality is fair.

The demand for herbaceous stock is slowly increasing, with Iris, Phlox and Paeonies most in demand.

ARLINGTON NURSERIES & FRUIT FARMS.  
Arlington, Nebraska.

The prospects for fall business are rather bad in apples and the stock will grade very fair. We shall have in surplus the Jonathan, Stayman's, Rome Beauty and Delicious. We do not think we shall be short on any varieties. We shall carry as our leaders Jonathan, Gano, Rome Beauty, Wine Sap and Stayman's Wine Sap.

In pear trees fall business prospects are very good and the stock will grade good. We shall have no varieties in surplus and will be short on 'Anjou, Kieffer and Bartlett. Our leaders will be Bartlett, Keifer and 'Anjou.

In plum trees prospects for fall business are very good and the trees will grade good. We shall have no varieties in surplus and shall be short on the Satsuma. Our leaders will be Bradshaw, Peach, Satsuma and Dawson.

Prospects for fall business in cherries are slow. The stock is good but we do not think we shall have any varieties short or in surplus. Our leaders will be Bing, Lambert, Napoleon and Windsor.

The prospects for fall business in peach trees are bad. The trees will grade fine. We shall have in surplus the Elberta, Carman, Triumph and Crawford's, but do not expect we shall be short on any. Our leaders will be Elberta, Crawford's, Triumph, Early Elberta, Carman, Mountain Rose, Orange Cling.

In small fruits the stock seems to be up to the standard of former years, with the greatest demand for raspberries and blackberries. We do not expect to have any varieties in surplus or short.

Nursery stock started off very slow but has made good since July first. The prospects for fall business in ornamentals is not good and the demand in this locality is very poor.

Roy, Utah.

DAVIS COUNTY NURSERIES.

There is an over supply of apples and the prices are low. The trees will grade very heavy, with a surplus in all varieties grown. Leaders will be Jonathan, M. B. Twig, Gano, Ben Davis, etc.

The prospects for fall business in pears are the best for years and the trees will grade medium to heavy. The largest surplus will be in the variety Garber.

In plums the prospects are very good and the trees will grade medium,  $\frac{1}{8}$  to  $\frac{5}{8}$  inch and under, with a small surplus. Leaders will be the Southern varieties.

With cherries business is looking up and the trees will grade heavy, with the largest surplus in the Richmond.

There is an over supply of Peach trees and prices are off. The trees will grade light over the southwest, with a surplus in all varieties grown. The leaders will be in commercial sorts.

The stock of small fruits is up to the standard of former years and the demand is extra good, with the heaviest demand for Black and Dewberry plants.

General rains, excessive over wide area, during early September will insure heavy planting. I consider the present season's outlook best in five years over this section.

Ornamental stock has not made as good a growth as usual. The prospects are for a heavy business this fall, increasing each season. The demand here is good.

Waxahachie, Texas. WAXAHACHIE NURSERY CO.

#### NEW YORK STATE NURSERYMEN ORGANIZE

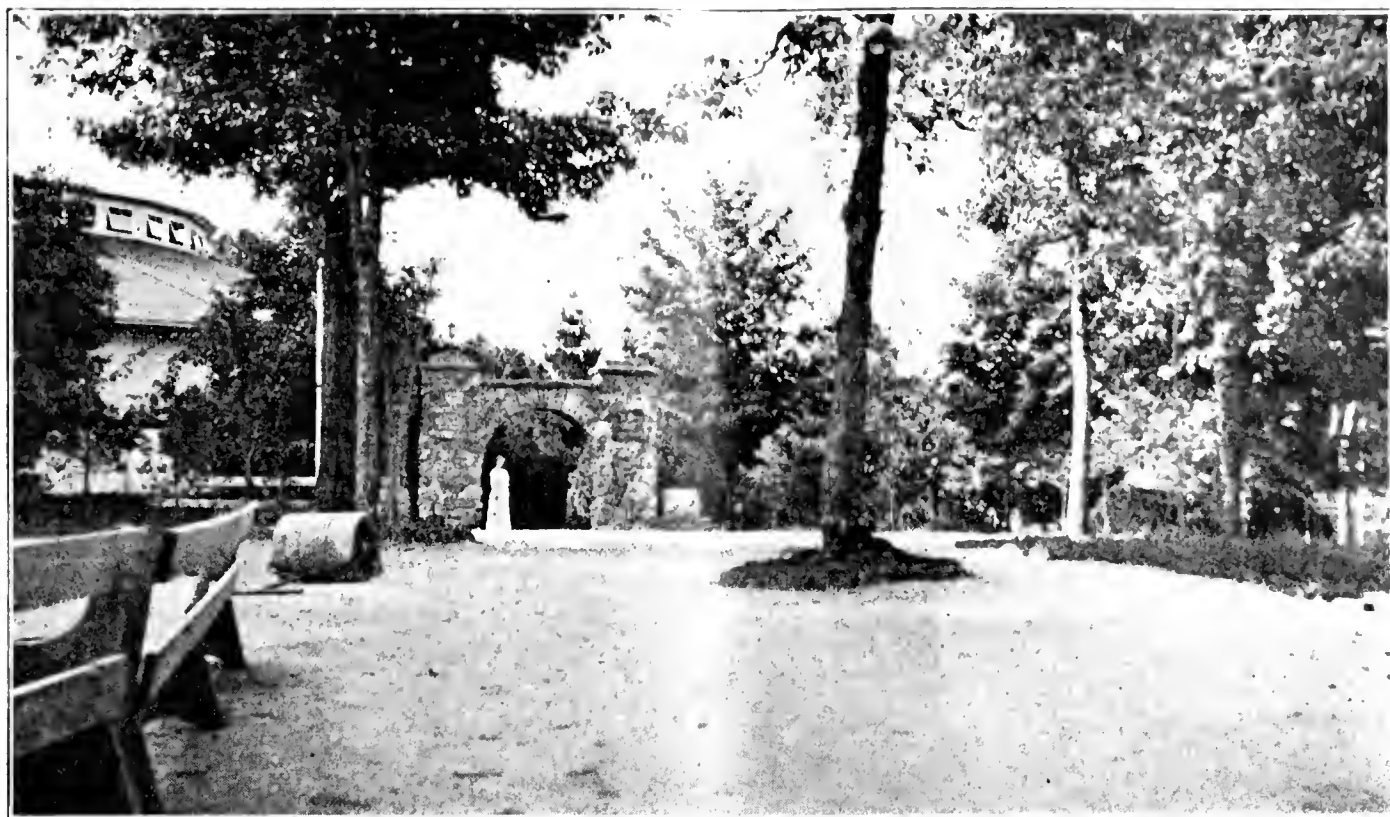
At a meeting of nurserymen held at Utica, N. Y., on September 4th, presided over by E. S. Osborne, of Rochester, the New York State Nurserymen's Association was formed. The idea is to cover the entire territory of New York State and bring the nurserymen under one association. The following are the officers elected:

President, E. S. Osborne, Rochester, N. Y.; Vice-Presidents, J. M. Pitkin, Newark, Maxwell Sweet, Dansville, F. A. Guernsey, Schoharie, and F. J. Smith, Fredonia.; Secretary, John Watson, Newark; Treasurer, Horace Hooker, Rochester.

#### NOTICE TO GROWERS OF GOOD STOCK

Advertisers and subscribers having a good block of nursery stock or choice individual trees or plants should send us a photograph of them. We shall be glad to illustrate them in THE NATIONAL NURSERYMAN.





THE ARCHWAY AT MONT EAGLE, TENN.  
Mrs. E. Fred Rowe, Harrisburg, Pa., near the arch

### THE SOUTHERN NURSERYMEN'S ASSOCIATION, HELD AT MONT EAGLE, TENNESSEE, AUGUST 27th AND 28th

There were present at this meeting about seventy-five (75), of the representative nurserymen of the South. All in all, it was one of the most profitable meetings in the history of the Association. The discussions for the most part were informal and the nurserymen who were present entered into every discussion that came up, and many experiences incident to nursery work in general were brought out to the profit of all present. The next meeting of the association will be held at Chattanooga, Tennessee, 4th Wednesday and Thursday of August, 1914. Officers for the ensuing year are as follows:

President, J. R. Mayhew, Waxahachie, Texas; vice-president, Harvey M. Templeton, Winchester, Tennessee; secretary and treasurer, A. I. Smith, Knoxville, Tennessee.

During the meeting the following matters of business were discussed and passed upon by the Association:

(1). Resolution was passed asking for favorable parcel post rates on nursery stock.

(2). Resolution was ordered empowering a committee to confer with the railroads of the South asking them to give better freight rates on crushed limestone in car load lots. A committee composed of Henry B. Chase, Huntsville, Alabama; A. J. Fletcher, Cleveland, Tennessee, and J. C. Miller, Rome, Georgia, was appointed to take up this work and report at the 1914 meeting.

(3). The Southern Association endorsed a resolution passed by the National and Pacific Coast Associations, calling for uniform inspection laws throughout the United States. To aid in this work members of the Southern Association contributed \$200.00 toward the expense account of the committee appointed by the National Association. Some of whom had already subscribed to the fund raised by the National Association.

On Friday, August 29th, a very pleasant trip was given those members of the Association who would go, visiting the different nurseries at Winchester, Tenn., Huntsville, Ala., and Chase, Ala.

A. I. SMITH, Sec.

### THE AMERICAN POMOLOGICAL SOCIETY

The tentative program planned for the "Washington Fruit Week" is as follows: American Pomological Society, November 17, 18, 19; Eastern Fruit Growers' Association, 19, 20; Society for Horticultural Science, 20, 21. Dates for the Northern Nut Growers Association have not yet been indicated. Plans are being made to devote the evenings to picture talks. Some excellent material, both home and foreign, has been promised. The 22nd is for a special feature not yet fully arranged. The S. H. S. will hold two sessions each day of its convention period. The A. P. S. and the E. F. G. A. will hold one or two joint meetings, with the A. P. S. covering part of the marketing discussions. The 17th will be devoted to committee hearings and the placing of exhibits.

That ought to make a full and very interesting and valuable meeting. If you have any suggestions to offer, please send them in early, so that the local committee can utilize them.

### A TRADE NAME ADOPTED FOR BEST GRADE OF APPLES

PORTLAND, Ore., Aug.—Leading fruit shipping organizations of the Pacific Northwest made history the other day when they announced that their various communities would ship their best apples under one trade name.

Perhaps if Teddy Roosevelt was asked to give his definition of the term "Skookum," the name selected, he would say "Bully." Whether Skookum is really bully or not



ONE OF THE GARDENS AT MONT EAGLE, TENN.

will be answered this season when the best apples grown in the world will be shipped under that title.

Skookum is of Chinook adaption and really means something very good. It is something better than good; it is the height to which the Chinook language can rise in expressing approval of quality.

Seasons for eating apples have been officially named by these organizations. The apple that is best to eat in October and November would probably taste like a pumpkin in the spring months or an apple best for winter consumption would likely prove very unsatisfactory eating if consumed during the late summer or early fall.

The varieties selected and the proper time for eating them have been officially named by Oregon-Washington apple growers as follows:

October and November—Jonathan; brilliant red; a splendid family sort; juicy, rich and vinous.

October, November and December—Grimes; golden yellow; an old time favorite; tender and spicy, with delightful aroma.

November, December and January—Spitzenburg; bright red; the aristocrat of apples; crisp, juicy; deliciously rich and fragrant.

November, December and January—Delicious; dark red; the latest favorite; sweet, mildly touched with acid; fine and melting.

December, January and February—Stayman; rich red; an improved Winesap; very tender with rich sub-acid.

January, February and March—Rome Beauty; red striped; the champion baker; sprightly and pleasant.

February, March and April—Yellow Newton; greenish yellow; the best late apple; fine flesh with refreshing high flavor.

February, March and April—Winesap; intensely rich red; very inviting.

### A NEW PEACH

September 11th sample fruit of the Stark Elberta Peach were received at the offices of THE NATIONAL NURSERYMAN from The Stark Bros. Nurseries & Orchards Co., Louisiana, Mo.

The fruit was as perfect as if it had just been picked off the tree which speaks well for its shipping qualities.

In fact its attractive appearance and evident shipping qualities are going to make it rank high as a commercial variety. Like the old Elberta, the flesh is yellow, and firm, yet juicy, but it is much superior in flavor and appearance. It is a decided freestone, rounder in shape and very highly colored.

From all appearances Stark Bros. have a peach that will become well known on the markets of the future.

It originated at Kaysville, Utah, where the seasons are short, owing to the altitude, even early varieties ripen late.

### CONNECTICUT NURSERYMEN'S ASSOCIATION HAVE AN OUTING AND DINNER AT SAVIN ROCK

The Connecticut Nurserymen's Association held its summer meeting August 27th. It was more of an outing nature than anything connected with business. Members assembled in front of the Collinade and gave each other the glad hand between 11 and 12 o'clock. Afterwards they sat down to one of the Collinade famous shore dinners, following which they adjourned to the alcove in the dining room talking shop for a little while and then took in the different sights at the "Coney Island of Connecticut," as Savin Rock is known to be. Most of the members journeyed to the Rock in autos and enjoyed themselves to the limit.

The Connecticut Association is a live one, embracing among its members all the progressive nurserymen of the state.

## THE NURSERYMAN'S SERVICE

**An Address by J. R. MAYHEW, Waxahachie, Texas, Before the Southern Nurserymen's Association at Mont Eagle, Tennessee.**

Mr. President, Ladies and Gentlemen:

A few days ago I received a communication from your worthy secretary inviting me to address you on this occasion, and very kindly suggesting that I choose the subject upon which I should speak. A delegation of gentlemen once waited on a banker friend of mine in my home town, inviting him to address our business club. After getting his consent they asked: "Judge, what subject shall we assign you on the program?" His answer was, "Gentlemen, the subject of my address is unimportant because," said he, "I make the same address on all subjects." I find myself pretty much in the same situation as was my friend, making the same address year after year before our association meetings. It would have mattered little whether our secretary selected my subject or whether, as he elected, he left the subject open.

My friends, I am glad to be in attendance on this the sixteenth annual meeting of the Southern nurserymen, a privilege I have not enjoyed as often in the past as I desired, and I assure you I appreciate the opportunity of talking to you today. Having been reared in this section of the country, my heart is especially warm and my feelings tender in sympathy and love for the splendid people of our dear old Southland. I will not be criticised for saying that within the borders of our splendid Southland there have always lived the bravest and truest men, the purest and most beautiful womanhood to be found on earth. There is something in the very atmosphere that bids the sons and daughters of this fair land be true. The very mountains which lift their majestic crowns above you and bid you "Lift up mine eyes unto the hills from whence cometh my strength." The trees in their majesty and beauty speak of the wonderful possibilities in plant life an example to man to be big, true, and beautiful in character. God has endowed this beautiful land with a bounteous hand, and who knows what an influence this proves in the lives of men? I realize as I look into your faces that I am talking to true and good men, men who are in the main measuring up to the opportunities that come to you day by day, and if you were not you would be unworthy of the heritage of this goodly land.

Coming over here I began to think on some suitable subject for this address and could think of nothing better to talk to you about than the nurseryman's service to humanity.

### SERVICE THE TRUE GAUGE OF GREATNESS

Man's worth is not measured in the dollars he has gathered to himself, neither is it a safe criterion to measure man's worth by the honors he bears, for property may be inherited or gains ill gotten, and honors are sometimes unworthily bestowed. There is but one correct rule to gauge man's worth, a rule suggested by that greatest of all Teachers two thousand years ago, a rule that has never and will never be

improved upon, the rule of service. The man who is worth most to the world is the man who gives most. Sentiment? No. Happiness is the goal of every human heart and the only road to happiness is through service. Go ask the great men and women of our illustrious past, and without a single exception they tell us that true contentment is found only in service to others.

The time was, and to some extent yet is, that that family who could trace its lineage farthest back boasted of "blue blood," and this has been more especially true of the people of the South than any other section. The question was, who are your kinspeople? We are today asking an entirely different question, i. e., what can you do? Shall we condemn the old régime as a whole? To my mind reverence for the traditions of the South are suggestive of many virtues, for that man who feels that royal blood courses through his veins strives to live up to that high mark of virtue obtained by his fathers.

I love to look into the face of the man who believes himself the peer of kings. I love to see the glow of pride in the eyes of men and women as they recount the deeds of valor of their fathers. Then, I love to see them go out into this beautiful world and, through loyal service to their fellows, prove themselves worthy sons and daughters of a noble ancestry, for service, may I repeat, is the true gauge of greatness.

In the men before me today I see men, not rich as the world counts riches, but men some of whom have grown gray in service to their fellows, and therein truly great men. In the particular line of activity in which you are engaged the possibilities of service to the world are great beyond comparison. With no intent to disparage other useful occupations, the service rendered the world by the merchant or banker is menial in comparison to yours. Oh, he may make more money, and the chances are that he does, and he may be able, because of this fact, to ride in high speed automobiles and go gaits that you cannot go, and I might add that you should not go, but, in comparison of the service he renders the world, he is not in the same class.

### SOME OF THE THINGS YOU ARE GIVING THE WORLD

There is not a student of economics but that realizes the influence of the æsthetic upon the lives of the young and, to some extent, upon the lives of the old. Surround the child with the beautiful things of life and you create within that life a love of the beautiful and the good. Withhold from that life the beautiful things of the world, and that life becomes dwarfed and its tendencies criminal. Had you ever thought that every tree, rose, shrub, or plant that goes out from your nursery goes out to bless humanity and proves an influence for good in the lives of others? Not for a day or a year, but so long as that plant lives. The world is coming to a realiza-



tion of this fact, evidenced on the part of our city fathers, school trustees, and social workers in the provision of parks and play-grounds. That board of control that fails to make adequate provision along this line is criminally negligent of the trust imposed upon it, as negligent as though heat during the winter months was inadequate, or ice and ventilation in the summer months.

The most deplorable sight, to my mind, is the crowded tenements of our cities where, hedged in from all the beauties of Nature, the child life is dwarfed and the criminal is bred. In my home town there is a beautiful little spot, only four hundred feet square, bequeathed to our people by two great men, both of whom have gone to their reward. One of them gave the land and planted thereon shade and ornamental trees. The other erected and endowed a public library. I pass by this place many times a week, and I thank God for these lives that have made it possible through this service for coming generations to acquire knowledge, for the provision of a place where even the poorest is welcome. Who can estimate the influence for good emanating from such an institution?

In our cities the apartment houses adjacent to the public parks are the most desirable resident properties, bringing returns many times greater than those otherwise situated. While visiting one of my friends in New York City, a few years ago, looking out from his window on a beautiful green sward with a few magnificent shade trees dotted here and there, a beauty spot where the prevalence was paved streets and brick houses, I remarked upon its beauty. "Yes," said my friend, "I laid in wait for these premises for months and pay a premium of \$15.00 per month for these rooms because they face this park." As I feasted my soul on this little spot of green with hundreds of children romping beneath the shade in their enjoyment, I soliloquized thus: "Some hard working nurseryman grew those beautiful trees, roses, evergreens, and therein made it possible for all this beauty and pleasure. I wonder who he was, or where he is if he still lives? I wish I knew that I might take him by the hand and tell him how much he has contributed to the world in this service." Only a tree, a rose, an evergreen, or a shrub bearing beautiful flowers. It takes only a few years to propagate and grow ready for planting. It is such a little thing. But this service, with God's sunshine and rain, stands year after year a monument to the nurseryman, growing more beautiful and more serviceable to mankind with age.

You know it is the commonest things that are of most value after all. Out in my state we occasionally strike an oil flow, and the news of the rich strike is heralded in glaring headlines through all the papers. A thousand wells of pure, life-saving water are passed by unnoticed, and still the service of water to a thirsty world is greater than all the oil, coal, iron, gold and silver combined. We breathe the pure air of a benignant Providence without a grateful thought, and worry our lives away after dollars that cannot provide one breath of pure air, and that oftentimes take the wings of the morning and fly to the uttermost parts of the earth. The service you render is a common service, but it is a beautiful service, nevertheless.

#### YOUR SERVICE IN THE SUBSTANTIAL THINGS OF LIFE

If our minds turn to the more substantial things of life and we judge our vocation counted in dollars and cents, we are giving the world wealth great beyond the dream of man. In considering the question from this point of view it is never safe to deal in generalities, for when you talk of dollars, men want to be shown. While thinking on this phase of the question, my eye caught two statements of fact, both happening to be from the good old state of Virginia. Wherever we develop the facts, however, the results are the same. "On thirty-two apple trees, which are about sixty years old and occupying just one acre, the crop of 1909 sold for an even thousand dollars. Its yield in some past years has brought a return of fifteen hundred dollars. The land in the neighborhood of this orchard is valued at from \$20.00 to \$40.00 per acre." If we figure the average for this sixty-year "young" orchard, every tree has contributed one thousand dollars to the wealth of the world. The planter who paid some of you nurserymen 25c per tree did not make a bad trade, did he?

Again, a Virginian writing on the subject says, "When I came into possession of my property it sold for \$7,500.00 and was not readily salable at that figure. Through planting orchards I have been able to sell off land in this tract to the amount of \$25,000.00 and retain a property worth two or three times its original value." You nurserymen know how small is the investment to set an acre or a hundred acres, hence I say in no other line of merchandising is the buyer getting so nearly value received, with measure heaped up, pressed down, and running over.

Today the mind of the southern nurseryman is engaged as never before in Pecan propagation, both nursery grown and through the process of top budding or grafting native trees. Over the entire South there are thousands of native Pecan and Hickory that are practically worthless. The process of top working converts a worthless native tree into a tree the value of which coming generations will compute, I would not attempt it, giving to the world great wealth and food. How can you even approximate the worth of such service. We have a man out in my state who is giving all his splendid mind and energies to the propagation of Pecans, and through love of his subject he is revolutionizing methods of Pecan culture. He is called by some a Pecan crank, but by those who know him best a Pecan enthusiast, and he is making good. If he lives long enough he will convert every native Pecan and Hickory in my state into a tree of great worth and wealth. This man will never acquire great wealth for himself because he has no secrets and he is working for the world at large, but the question I would have you consider is, what is his worth? To my mind he is worth a hundred—yea, a hundred thousand millionaires, who contribute nothing to the economy of the world's progress.

Some way, some how, some where, in that day when we come at last to give an account of our stewardship, when the records shall have been opened, I shall not be afraid to take my place along with the balance of you who have been busy making the world more beautiful. To the credit of one will be fruit trees by the million, giving out their wealth of food from generation to generation. What is the worth of such a

life? To another, beautiful shade trees, ornamental trees, roses, flowering shrubs, making the world more beautiful and bringing the lives of men and women in closer touch with God, creating from generation to generation an atmosphere of good cheer, of fellowship, and of brotherly love. Again, let me ask, what is the worth of such a life? If, as I have stated, man's worth is judged according to the service he has rendered the world—yours is not a mean or despised service.

HUCKLEBERRY CULTURE IN INDIANA

By Alvia G. Gray

Owing to the delicious flavor and high quality of the huckleberry, it has been selling for extremely high prices on all of the large city markets. It is now commanding the attention of commercial growers. This berry grows wild in many of the states, being found as a rule on high rocky ridges

cultivated state this mulch must be supplied by using leaves, straw, pine needles, chaffy manure or litter of any kind free from seeds.

To start with, make sure that you get good, well rooted plants that have been kept in a good moist condition. It is far best to plant in early fall, soon after killing frost. Have ground well cultivated and set ten inches apart and rows thirty inches apart. They do best set close together. Do not set too deeply as they grow almost on the top of the ground. We consider two inches deep enough. Press soil firmly and cultivate at once. Keep cultivation up until cold weather and mulch heavily. Don't expect a full crop of fruit at one year. It is well worth waiting two years for. They ripen here at my nursery at Salem, Indiana, during the second and third weeks of July. They are easily picked. Fruit is so solid that they will bear shipment across the United States and will keep for days.



BLUEBERRY PLANTATION }

and in rather light soil. In this wild state many kinds are found ranging in size from very small to as large as Gooseberries. Only in recent years has it been demonstrated that they will respond to cultivation. Even then care must be taken to keep conditions as near as possible to its natural element. When wild they are mulched with leaves and in a

Abilene, Kansas, August 16, 1913 }  
GENTLEMEN:  
I have been away in the East. Just returned. Send NURSERYMAN, August number at once. Can't run the nursery business without it. Inclosed find check.  
Yours truly,  
W. T. GOUGH, & Co.

“THE MONTHLY SUMMARY OF COMMERCE AND FINANCE” FOR JULY, 1913, GIVES THE FOLLOWING REPORT OF IMPORTS OF PLANTS, TREES, SHRUBS AND VINES.

ARTICLES	JULY—				SEVEN MONTHS ENDING JULY—					
	1912		1913		1911		1912		1913	
	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values
Plants, trees, shrubs and vines:										
Fruit plants, tropical and semi-tropical, for propagating purposes <sup>2</sup> . . . . . free . . . . .		7		7,415		2		12,891		12,867
Bulbs, bulbous roots, or corms, cultivated for their flowers or foliage . . . . . M. . dut . . . . .		38,620	3,815	40,868		228,467	21,571	150,117	12,181	117,098
All other . . . . . dut . . . . .		8,181		5,12		690,952		722,869		794,751
Total . . . . .		46,808		53,295		919,421		885,877		924,716

# GROWING PECANS

An Extemporaneous Address by JUDGE CHARLES L. EDWARDS, Dallas, Texas,  
Before the Farmers' Congress

## HARDINESS OF PRIME IMPORTANCE

Among desirable traits in nut trees, that of hardiness is of prime importance, especially in Northern portions of the pecan area.

In the early years of my experience it was found that the large, thin-shelled varieties originating on the Gulf Coast might be rendered more hardy by working them on our natives. For instance, the Russell pecan, a variety of strong merit, has been recommended as suited only to low latitudes. A neighbor having a tree of it gave me some bud from it and these were put on native stocks in the spring of 1907. His tree, grown by a nurseryman in Southern Mississippi, and presumably grafted upon a seedling from a nut produced in that region, was killed to the ground by a sharp freeze in November following. The shoots grown from the buds of that tree, put on natives during the previous spring, passed uninjured through the same freeze. Since then my records show similar results with the Frotscher and Success, both of them excellent varieties of low-country pecans. It may now be set down as a demonstrated fact that pecans from the lower latitudes, when budded on native North Texas stocks, become more hardy, as does the orange when worked upon seedlings of the citrus trifoliata. For up-country nut-growers this may be considered a distinct improvement.

## EFFORTS TOWARD EARLIER BEARING

A leading objection urged against the pecan industry is that the trees are too tardy in beginning to bear. Our native trees furnish a remedy for this, too, for now and then we find one that begins to bear when five or six years old. One of these trees grows near me, and it not only began to bear when very young, but for some twenty years has been a regular and abundant producer. It is vigorous in growth, symmetrical in shape and has proven to be a mother tree of exceptional excellence. Seed-nuts from it were planted in 1906 and the seedlings were budded as they became of proper size to several different varieties of standard, soft-shelled pecans. Several of the young trees so produced gave first fruits early. The Van Deman, usually considered a slow-bearing sort, is fruiting this season at seven years from the seed; the Stuart and Teche came in at six years from the seed, the Georgia at five, the Halbert and Texas Prolific at four years. Other seednuts bought in the market were planted the same season and budded with the same varieties. All have had the same care, but results have been greatly in favor of those budded upon seedlings grown from nuts from the neighbor tree, with a known record for early, regular and prolific bearing. I raise no trees to sell, but if you were going to transplant, which lot would you select from? It is a little strange to me that while people are selecting their seed corn and trying, by the same methods, to improve their cotton, their melons, tomatoes and all that, we seldom hear of one who is trying to improve fruit and nut trees by seed and bud selection. A number of instances could be given from my own experience to show that peach and pecan trees respond as readily to the rules of correct breeding as any other species of plants. The peach and pecan are mentioned, because my experiments in tree-breeding have been mainly with them. Others, equally interesting, are under way, and report will be made in due season. All this work is done according to the maxim of the progressive live stock man: "Good blood at both ends of the line." Translated into horticultural terms, it means, "every seedling from a good seed and the seed from a good tree; every bud and graft from the best bearing trees and every plant a thoroughbred." I have been harping upon this string for years, and expect to continue the music, for in it we must recognize the very foundations of Progressive Horticulture.

## SHOWING THE GOODS

To submit a talk like this without evidence in support of it would not only be a strain upon your credulity, but an injustice to myself. From time to time, in printed articles and otherwise, I have been telling you about putting buds from early bearing trees upon seedlings grown

from nuts produced by early bearing trees. Over and over you have heard the story of two-year seedlings bearing nuts two years after budding; of three-year seedlings bearing the next year after budding and of four-year seedlings budded in early spring and producing nuts the same year. Not all of them do it, but some of them do it. Those that produce nuts the same year the bud is put on, and those that produce the next year after the bud is put on are all saved for future breeding. But it has become so common for little trees to bear the second year after budding that I have dug out two specimens and brought them with me. Here is a little fellow scarcely more than three feet above ground showing a two-year graft with a cluster of four or five nuts. And here is another, not over four feet, with two-year bud, well branched with growing nuts on nearly every twig, aggregating about twenty nuts in all. Take them, look at them; many of you are veteran horticulturists and know something of the age of young pecan trees as well as the age of bud shoots. What do you think of them? Here again is a little box of Stuarts from a two-year bud that produced a round dozen of nuts last season. That tree was left at home and will stay there. Here again are other little boxes of Mobile, Frotscher and Delmas from trees that began to bear at three years from transplanting and have been doing business ever since. Say for yourselves if they are not as fine pecans as you ever saw from the coast country or any other country. Here, again, is a box of Halberts from a baby tree with a two-year bud-shoot that produced fifty-five nuts last season, weighing one nut over three-quarters of a pound. They are not up to full size, as you will see, although the little tree was freely watered and did its best. It is doing some business again this year and will be kept for a mother tree. Does not all this indicate that our native trees may be made useful, not only in rendering the finer varieties more hardy, but in making them more prolific and more precocious as well? And are not these distinct and desirable improvements? In observing the common run of wilding trees budded with the finer varieties I have found that about one in a hundred of Halbert bears the same year the bud is put on; Of the Stuart about one in a thousand bears the second year, and I have known of only two instances in many thousands where the Stuart fruited the next year after budding. How does this compare with trees bred from selected seed nuts and selected buds, as before related? Does it not spell something in favor of correct methods in the breeding of trees? A great deal more could be said on these lines, but under my time allowance the subject will be left as it stands and a few words given to my friends among the nurserymen present on the better methods in the budding and grafting of pecan trees.

## NEW KINKS IN BUDDING AND GRAFTING

For years and years I have been describing by illustrated articles what seemed to me better and simpler ways of doing this work. I have also been insistent upon as much as possible of this part of propagation being done in the spring months. The spring-set bud has the whole growing season before it and makes a salable tree by fall. The summer bud makes only a start into growth before fall, most of them remaining dormant until the following spring, and not a few drying out and dying out. And you put on grafts only in late winter or very early spring. A graft may be put on just as easily in summer as in winter. But why graft? In the great majority of cases buds answer as well and are far more easily worked. The simple truth is you lack faith in springtime budding. Let me venture the suggestion that the graft is seldom necessary except when one has some valuable scions that are too small to use for budding. To strengthen my argument in favor of the spring-set bud and the summertime graft, as well as to call your attention to some new kinks in both processes, I have brought along the goods. Experience has taught me that written articles with plain illustrations are less instructive than the living talk and a show of the real things one is talking about.



## ANOTHER DISPLAY OF GOODS

Here, now, are some little grafts put on and grown expressly for this meeting. You do not have to be told how the mechanical part of the work is done, for you know. But it may be well to explain some preliminaries. The scions used for summer grafting should be artificially matured, the same as in the preparation of budwood for summer work. That means the leaves should be cut from shoots of the present season's growth, about two-thirds of the length of the shoots, allowing the leaf stems to remain. These leaf-stems will fall away in three or four weeks, leaving matured buds ready for use. In cutting your graft scion, take only one bud with it. The usual practice is to take two or three buds. But what's the use? The mutilation of the stock necessary in putting on the graft greatly interferes with the flow of sap into the graft scion. Then why have two or more buds making a double draft upon a scant source of sap supply, when you want only one bud to grow? See the point? Try it; wrap with cloth dipped only in beeswax, tie firmly, cap the tip of the scion with a bit of the waxed cloth, and see for yourselves if the graft put on in summer will not grow as well as any other graft. The specimens shown speak for themselves, and the crown and whip methods succeed equally well. Again, if you put on any grafts next winter or spring, have only one bud on your scions, and see if you do not make a better saving. But above all things, pray for deliverance from the grafting habit when buds can be used instead.

Let me now show you some young budshoots from seedlings worked on the Fourth of July, only a little more than three weeks ago. Thrifty little fellows they are, four to six inches in length. By examining them you will see that the stocks were cut off bodily and straight across. A slit was then made in the bark at the top and the bark opened to receive the bud. You will note also that the buds are cut like shield buds for peaches and plums. But in addition to this the bark is cut away from the lower end of the bud, reducing it to a point so it will slip into place easily. By removing the thick rim of bark from the lower end of the bud, the sap from the stock will enter it easily and force it into immediate growth, whether put on in early spring or as late as September. You are now ready to put on the wrapper, an oblong little square of waxed cloth with an eyelet in the middle for the bud to peep through. In preparing the cloth for these wrappers, use only beeswax. If anyone insists upon your using grafting wax for this purpose, spare his life, but turn a deaf ear to him. Be sure to tie on the wrappers firmly, and see also that they cover the entire top of the stock, leaving no part of the wounds made by the knife uncovered.

No one who has worked pecans in this way will ever return to the old, clumsy and difficult processes. I am in a position to know that it is being adopted with great satisfaction by progressive nut nurserymen and that thousands and thousands of young trees propagated in this way are coming on splendidly. Not only this, but several bright young fellows who have learned to do the work in this way are having good demand for their services at a rate of compensation away ahead of clerkships and all that.

You have shown an interest in those summer buds, four to six inches long, put in a little over three weeks ago. Now let me show you some other budshoots four to six feet in length, put on last April, just about three months ago. There are thousands like them in the nursery they came from. Do not they of themselves constitute an exemplified sermon in favor of budding in spring? Note the difference in size between four inches and four feet; between six inches and six feet, and then ask yourselves why any one should sit on the stool of do-nothing waiting for summertime before beginning to bud pecan trees. The method described can be used at any time; bark will slip on pecan seedlings from March until October.

## IN CONCLUSION

In closing, let me say the good wife often speaks of our pecan trees as my wooden children; and they are—every one of them that is worked by my own hands. And those worked by other hands through my instruction are my grandchildren, every one of them. They number away up in the thousands already, and I reasonably hope to see them reach a round million before my time is out. And I would rather leave such a legacy to my people and my country than any fortune of a million dollars. Allow me again to venture the prophecy that within the first

half of this century the pecan crop of the South will be second only to its cotton crop; and if it be that there is a life beyond this one, there is happiness in store for the sturdy pioneers who laid the foundations of an industry that shall bless our neighbors and our neighbors' children in the years to come.—*Semi-Weekly Farm News*.

## CALIFORNIA NURSERYMEN'S ASSOCIATION

The third annual meeting of the California Nurserymen's Association will be held at Fresno, Cal., on October 16, 17 and 18 in the Fresno Hotel.

It was the nurserymen of the Pacific Coast who, at the convention of the American Association held in Portland, Oregon, June last, suggested the campaign for Uniform Horticultural Laws. The success in raising subscriptions to defray the expense of this work will undoubtedly bring forth a great deal of discussion of the subject at this meeting. A good program has been prepared and there is no question but what the meeting will be a success in every way.

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PLUM  
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FOREST SEEDLINGS  
APPLE SEEDLINGS

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" " 3 to 4 ft.	" " 3 ft.
" " 4 to 5 ft.	" " 3 to 3½ ft.
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" " 2 to 3 ft.	" " dbl., 3 to 4 ft.
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" " 2 to 3 ft.	Probelli, 2 to 2½ ft.
" " 3 to 4 ft.	" " 2 to 3 ft.
" " 5 to 6 ft.	Prunifolia, 2 to 3 ft.
" Violet, 12 to 18 in.	" " 3 to 4 ft.
" " 18 to 24 in.	" " 3 to 4 ft., 3 yr.
" " 3 to 4 ft.	Van Houttei, 2 to 3 ft.
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" " 2 to 3 ft.	" " 3 to 4 ft.
" " 3 to 4 ft.	" " 4 to 5 ft.
" " 4 to 5 ft., 5 yr.	Viburnum, Plicatum, 2 to 3 ft.
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Meehani, 3 to 4 ft.	" " 3 to 4 ft.
Pink, 5 to 6 ft.	" " 4 to 5 ft.
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Violet Clare, 18 to 24 in.	" " 2 to 3 ft., 2 yr.
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Deutzia, Crenata, 2 to 3 ft., 3 to 4 ft.	" " 3 to 4 ft.
Gracilis Rosea, 2 to 2½ ft.	Rosea, 2 to 2½ ft.
Lemoinei, 2 to 3 ft.	" " 2 to 3 ft.
" " 3 ft.	" " 3 to 4 ft.
Pride of Rochester, 2 to 3 ft.	Variegated, 2 to 2½ ft.
" " 3 to 4 ft.	Barberry, Thunbergii, 12 to 18 in.
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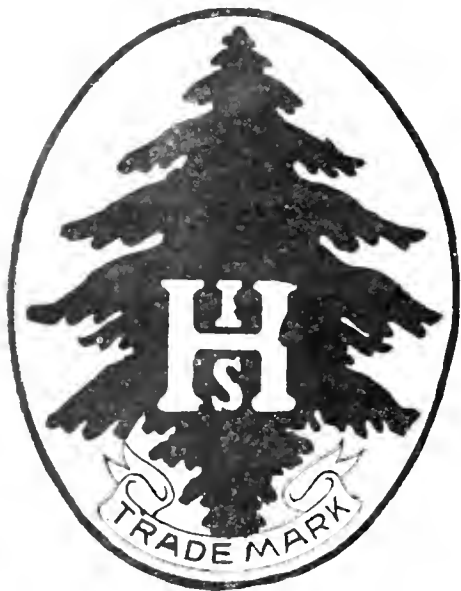
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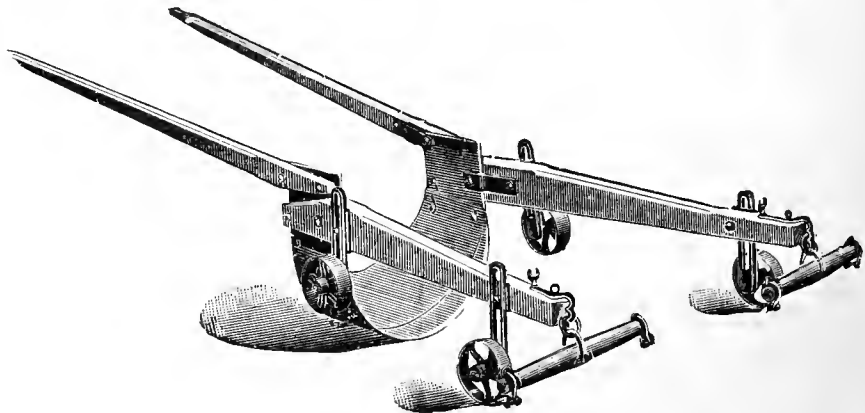
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Blackberry and Raspberry Plants

The finest stock I ever raised.

There's none finer anywhere. This, and the fact that my prices are attractive and service prompt, should appeal to the good judgment of my fellow nurserymen everywhere, who want something a little nicer than the other fellow has. I solicit the wholesale trade. I have an unusually liberal quantity of **Golden Queen, Herbert, St. Regis, Columbian, Haymaker**, and a dozen others in Red and Black Raspberry; also a splendid lot of **Eldorado, Early King, Early Harvest, Mercereau** Blackberries, **Lucretia** and **Austin Dewberry** and 100,000 **Blower Blackberry**. Also a million **Strawberry** and then some. **WRITE.**

## Wick Hathaway's Berry Plant Nursery

Dept. 3  
Madison, Ohio

THE MOST EXTENSIVE, EXCLUSIVE BERRY PLANT NURSERY IN OHIO



## DON'T TAKE OUR WORD FOR IT! TRY IT YOURSELF FOR 10 DAYS WITHOUT DEPOSIT

If not satisfactory, simply return it and no questions asked.

The **Daus' Improved Tip Top Duplicator** is the result of 25 years' experience and to-day is used and endorsed by thousands of business houses and individuals, including prominent Railroad and Steamship Companies, Standard Oil Company, U. S. Steel Corporation, etc.

Our negative rolls now have our new "**Dausco**" Oiled Parchment Back, giving additional strength and efficiency.

**100 copies** from pen-written and **50 copies** from typewritten originals—Clear, Clean, Perfect.

Complete Duplicator, cap size,  
Price \$7.50 less special dis-  
count of 33 1/3%

**\$5.00**

Felix A. G. Daus Duplicator Co. . . . . Daus Building, 111 John Street, New York



# See the Root-Growth on Harrisons' Trees Only Expert Care Produces Such Results

Have you a trade that will appreciate trees with such a root growth as this? A trade that demands a tree with a shapely head, and straight, well-trained trunk? Trees that are grown in Harrisons' Nurseries have all these qualities, because they are grown in the loose, sandy loam of the Eastern Shore of Maryland, where the roots can run freely and make a mass of fibres that will insure future growth and development in the tree wherever it is planted.

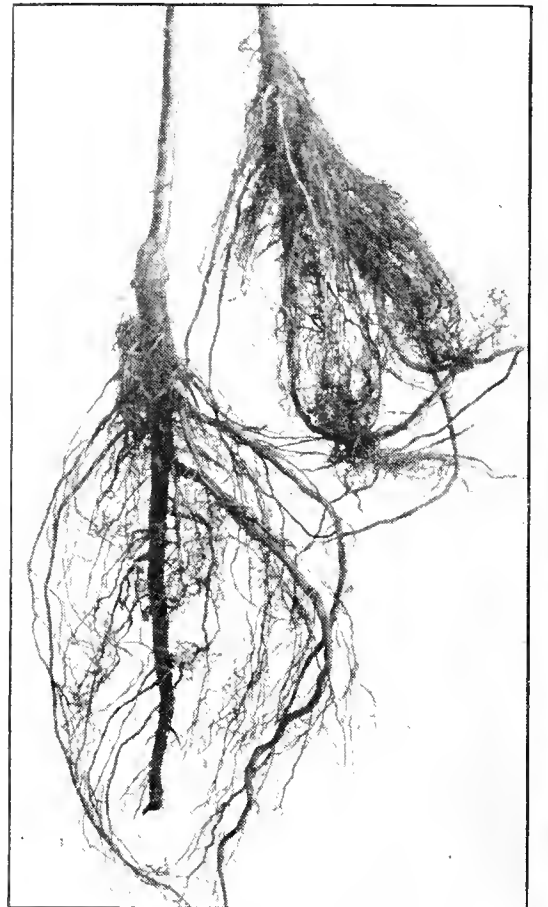
Then we cultivate these trees and hedge plants all summer, keeping a dust mulch around them, and killing all the weeds—no chance for anything but *trees* and *roots* to grow in our nurseries. The care we put into these trees and hedge plants when they are little shows itself in the splendid specimens they make when grown up.

## Your Customers Want Such Specimens and will Pay You a Good Price for Them

When you fill an order with first-class, high-grade trees like these, there is feeling of satisfaction that never comes when you are not *quite sure* about the quality of the stock. What's the use of having any uncertainty about the trees you send to your customers? It is the "Repeat Order" that brings the profit to you and if you send out Harrisons' trees you need not fear about the future orders—they will come.

## We Have Evergreens, Shade Trees and Hedge Plants in any Quantity for Every Purpose

We have thousands of Koster's and Colorado Blue Spruce, Norway Spruce, White Pine, Hemlocks and Cedars.



A PART OF A BLOCK OF 80,000 NORWAY MAPLES

Elberta Peaches; Keiffer Pears; Early Richmond Cherries—these are only a few of the good things we have. Ask us for prices on the stock you need.

You will find California Privet here by the mile—over half a million plants in varying sizes.

There is one block of a hundred thousand Norway Maples in our nurseries, and another of Silver Maples that has nearly fifty thousand trees. There is ample time for shipping this fall if you place your order now, or we will enter your order for shipment next spring if you wish.

## It is a Good Time to Order Fruit Trees for Spring Delivery

Our long season puts extra strength into our trees and they gain in vitality every day they are in the ground. You will need Apples, Cherries, Peaches, Plums, etc., for next season. We can furnish almost any variety in large or small lots—Baldwin, Stayman, York, Yellow Transparent Apples; Ray, Crawford and

**Harrison's Nurseries**  
J. G. HARRISON & SONS PROPRIETORS  
BERLIN MARYLAND

Designed and written by The McFarland Publicity Service, Harrisburg, Pa.  
W. F. HUMPHREY, PRINTER, GENEVA, N. Y.



# THE NATIONAL NURSEYMAN



NOVEMBER 1913

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

## THE MONROE NURSERY

Established 1847.

OFFER A GENERAL LINE OF

### Choice Nursery Stock

## CHERRY and STD. PEAR

of Extra Fine Quality.

If you are in the market for superior trees write  
us for prices.

**I. E. Ilgenfritz' Sons Co.**  
MONROE, MICH.

## EVERGREENS OUR LEADING SPECIALTY

RHODODENDRONS, HEMLOCKS, WHITE  
PINES, BOX BUSH. A general collection  
of specimen ornamentals.

ALSO

NORWAY MAPLES, PIN OAKS, IBOTA  
PRIVET, SPIRAEA VAN HOUTTEI  
by the thousand.

## Andorra Nurseries,

WM. WARNER HARPER, Prop.

CHESTNUT HILL, PHILA., PA.

## MOUNT ARBOR NURSERIES

E. S. WELCH, Proprietor

136 Center St., Shenandoah, Iowa

Make a Specialty of a Complete Line of High Quality Nursery  
Stock for WHOLESALE TRADE

APPLE—We wish to call your attention to our fine lot of Apple  
for this season's trade. They are the best we have  
ever grown. None better on the market. Let us quote  
your wants in these.

Large stock of Peach, Plum, Cherry, Currants, Gooseberries,  
Blackberries, Root-Cutting Plants.

ORNAMENTALS—Elm, American White; Maple, Silver  
Leaved; Privet, California and Ibota.

ROSES—Hybrid Perpetuals, Moss and Ramblers.

FOREST TREE SEEDLINGS

APPLE SEEDLINGS

APPLE GRAFTS, made to order

Ask for our Fall Trade List, which will be issued early in Sept.

Always pleased to quote your wants

## THE JEWELL NURSERY CO.

*Wholesale Nurserymen*

LAKE CITY, MINNESOTA

Established 1868

1500 Acres

Everything in the line of Nursery Stock  
suited to Northern culture.

*Let us figure with you*

Now is the time to place your orders for  
**Direct Importations**

from European Nursery Centers

**FRENCH FRUIT STOCKS**

Apple, Pear, Myrobolan, Mahaleb, Maz-  
 zard Seedlings, Manetti, Multiflora and  
 Quince stocks. Also full line of Orna-  
 mental for lining out, from Vincent Le-  
 breton's Nurseries, Angers. Best pack-  
 ing and grading. December or February  
 shipment from France.

**Boskoop, Holland, Nursery Stock**

Boxwood (pyramids, bushes, standards,  
 ball-shape, etc). Roses, Tree Roses, Rho-  
 dodendrons, Azaleas, Magnolias, Koster  
 Blue Spruce, Evergreens, Hydrangea P.  
 G., etc., etc., from Schaum & Van Tol,  
 Boskoop.

**DECIDUOUS TREES**

Norway and Schwedler Maples, Tili-  
 as, Elms, Chestnuts, Oaks, Planes, Thorns,  
 etc., etc., etc., straight stems and good  
 roots, careful selection, best packing from  
 Union Nurseries, Oudenbosch, Holland.

Besides representing the above firms  
 as Sole American Agents, we import to  
 order

**FROM JAPAN AND ENGLAND**

English Manetti, Gooseberries 2 and 3-yr.  
 (Whinham Industry, Whitesmith, etc.),  
 Japanese Nursery Stock and Lilies.

**BAY TREES.** Standards, Pyramids and  
 all shapes from Belgium, Fall or Spring  
 shipment.

**RAFFIA.** Red Star Brand and four  
 other grades; also dyed Raffia in 20 colors.  
**WRITE US** for catalogs, special lists,  
 etc., stating the class of stock you are  
 interested in.

**SHIPPING.** We have our own Custom  
 House Dept., with shipping connections  
 at Havre, Hamburg, Rotterdam, Antwerp,  
 Southampton, etc.

**McHutchison & Co.**

17 Murray St.  
 New York

The Import  
 House

**SIMPSON**

is the name of the men who grow the finest

**CHERRY**

that can be produced by suitable soil, climate and  
 expert knowledge.

Take a look at the stock or ask for a sample and  
 be convinced of the extra quality of their

**TREES**

PEACH

ST. PEAR

APPLE—1 year, 2 year and 3 year  
 AMERICANA PLUM ON PLUM  
 COMPASS CHERRY ON PLUM

**H.M. Simpson & Sons**

VINCENNES, INDIANA

**Griffing Brothers**

**Grow the Better Kind of Trees**

**PECANS,** Budded or Grafted

**PLUMS** on Plum Roots

**PERSIMMONS,** Japanese

**FIGS,** Celestial, Magnolia, Brown Turkey  
 varieties

**SCUPPERNONG, JAMES** and other Mus-  
 cadine Grapes

**MULBERRIES,** well branched trees, free  
 from Blight

**CAMPBOR** Trees

**CONIFERS** and Evergreen Trees

**PALMS** and Tropical Plants

**SATSUMA** Orange and other Citrus Fruits

Prices are Right

Trees are Right

**Griffing Brothers**

JACKSONVILLE, FLORIDA  
 MIAMI, FLORIDA

MOBILE, ALABAMA  
 PORT ARTHUR, TEXAS



# NURSERYMEN AND FLORISTS

looking for stock can find  
largest assortment in the  
United States at the . . .

## Painesville Nurseries

Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses,  
Vines and Plants, Grapes, Gooseberries, Small Fruits, Bulbs, Seeds,  
Palms and other tender Greenhouse Plants

Have large stock stored in frost-proof cellars that can be shipped at any time  
desired; switch from N. Y. C. lines direct into our packing house; can load without  
exposure. Unsurpassed facilities for handling orders large or small.

CATALOGS AND PRICE LISTS FREE



EUROPEAN LINDEN

A FEW SPECIALS WHILE THEY LAST: STANDARD PEARS in assortment, DUCHESSE  
DWARF PEARS, BOURGEAT QUINCE, PRUNUS PISSARDI and TRILOBA, CUTHBERT and  
other Raspberries, CONCORD and other GRAPES

### OUR SPECIALTIES ARE

Roses, H. P. Moss, Ramblers, Climbers, etc., Peaches, Pears, Plums, Cherries,  
Ornamental Trees and Shrubs in car lots, Weeping Mulberries, Elm and Ash,  
Clematis, Ampelopsis, Paeonies, Hydrangeas, Bush and Tree Perennial Plants.

No Trouble to Price your List of Wants. 59 Years 1200 Acres 44 Greenhouses

## THE STORRS & HARRISON CO.

PAINESVILLE, OHIO

# WATCH OUR BULLETINS

IF NOT ON OUR MAILING LIST  
WRITE US

**C. R. BURR & CO.**  
MANCHESTER, CONN.

## SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY  
PEACH PLUM

A Fine Block of  
Own Root Roses

ORNAMENTAL TREES SHRUBS  
BERRIES CLEMATIS  
EVERGREENS PEONIES PHLOX  
PYRAMIDAL and STANDARD  
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists  
and carload lots.

**W. & T. SMITH COMPANY**  
GENEVA, N. Y.  
63 Years 700 Acres

Apple Seedling  
Japan and French Pear Seedling  
Apple Grafts Made to Order  
Catalpa Speciosa and Russian  
Mulberry Seedling  
Apple Trees, 2 years

Our Apple Trees are a clean, healthy lot,  
strictly first class and will please you. Let  
us price your wants.

Kieffer Pear, 2 Years  
Peach Cherry, 1 year Gooseberries  
Rhubarb Shade Trees  
Flowering Shrubs, in Variety

We have a very fine stock of Althea, both  
tree and bush form. Good list of varieties.

**J. H. SKINNER & CO.**  
TOPEKA, KANSAS

## BERCKMANS' SPECIALTIES

WE OFFER TO THE TRADE THE FOLLOWING

### CONIFERS

Biota aurea nana, all sizes. Biota aurea conspicua, from 2 to 12 ft.  
Retinosporas, various sorts. Thuja Pumilla,  
Cupressus pyramidalis, from 1 to 10 ft. Junipers, in variety.

### BROAD-LEAVED EVERGREENS

Aucuba Azalea Indica  
Berberis Japonica Camellia Japonica  
Camphor English Laurel  
Gardenias Ligustrums, in variety  
Magnolia Grandiflora Olea fragrans  
Magnolia fuscata Osmanthus aquifolium

### HEDGE PLANTS

Dwarf Box Citrus Trifoliata  
Privet, California and Amoor Spiraea Thunbergii

### CLIMBERS

Ampelopsis quinquefolia Euonymus radicans  
Ampelopsis Veitchii English and Algerian Ivy  
Rhynchospermum Roses, field grown, own roots and  
Wistaria, grafted, best sorts budded

### DECIDUOUS SHRUBS

Cornus Deutzias  
Exochorda Hydrangea, Otaksa, etc.  
Philadelphus Pomegranates  
Spiraeas Lilacs, best sorts, grafted  
Styrax Japonica Cercis Japonica

### SHADE TREES

Elms Hackberry  
Magnolia purpurea Salisburia  
Texas Umbrella Tulip Poplar  
Cercis canadensis Weeping Mulberry

### FRUIT AND NUT TREES

Apples, leading sorts Peaches, never offered better stock  
Mulberries, grafted Spanish Chestnuts  
Figs Nectarines  
Olives Almonds  
English Walnuts Japan Walnuts

We grow a general line of nursery stock for the northern as well as the  
southern trade. Wholesale and retail catalog for the asking.

**P. J. BERCKMANS CO., Incorporated**  
FRUITLAND NURSERIES AUGUSTA, GEORGIA  
Established 1856. Over 450 acres in nursery.

## The Best Tree Digger on Earth



Used and Recommended by Leading Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

**Stark Bros. Nursery & Orchards Co.**  
LOUISIANA, MO.

We have every facility for growing evergreens from seed—*plus* the finest natural location that we know of in the United States, *plus* over 50 years' practical knowledge of how to do it best. We are now growing millions of them for nurserymen's and dealers' trade, lining out, etc., and you will find

## Hill's Evergreens

the best investment you can make—if you are looking toward permanent results and satisfied customers, as well as the first cost of the trees. We go to a great deal of trouble and expense gathering and sowing our seed, but we think it's worth it all to know that the little trees are true to name, and healthy and vigorous. Our customers, too, have found that it's worth the cost to know that they're getting *reliable* trees when they buy here. If you want the best evergreens you can get for your trade let us tell you more about those of "Hill Quality."

**THE D. HILL NURSERY CO., Inc.**  
*Evergreen Specialists*

D. HILL, President Box 401, DUNDEE, ILLINOIS

**L. Spaeth** **BERLIN**  
Baumschulenweg  
GERMANY

## Largest Nurseries in Europe

2000 ACRES

FOUNDED 1720

## HARDY TREES AND SHRUBS

1. Our nurseries lie in a colder climate than the French, Dutch and English nurseries—
2. We grow all the stock we sell—
3. Moderate prices.  
Catalogs free—
4. When in Europe come and see our nurseries—

Have you seen and examined the quality and finish of our

## Rawhide Brand of Shipping Tags and Tree Labels

printed or plain, strung or wired?



This stock is especially adapted to the most severe usage, being thoroughly waterproof & weather-proof. "Once used, always used."

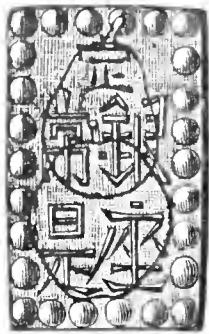
Send for samples and prices. Our reference are the largest nursery men in the United States.

## The Denney Tag Co.

WEST CHESTER, PENNSYLVANIA



## Heikes --- Huntsville --- Trees



Huntsville  
Wholesale Nurseries  
Huntsville, Ala.  
JESSIE S. MOSS, Prop.

We offer for Fall of 1913  
in large quantities as usual:

### SPECIALTIES

**APPLES**—Commercial varieties, one and two year, in large supply. As fine in quality as ever grown.  
**PEARS**—Kieffers, one and two years old. A much smaller crop than heretofore.  
**CHERRIES**—On Mazzard. Two year, Bing, Lambert, Napoleon, Black Tartarian.  
**CHERRIES**—On Mahaleb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.  
**PEACHES**—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.  
**ROSES**—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.  
**PRIVET**—Amoor River (South). Retains its foliage longer and holds its color better than California Privet.  
**PECAN SEEDLINGS**—Huntsville grown from selected nuts collected along the Gulf Coast. Thin shell.

See Price List for Particulars.

Address, HUNTSVILLE WHOLESALE NURSERIES  
HUNTSVILLE, ALA.

## Yellow Rambler

The latest in roses and completing a wonderfully fine collection of Baby Roses, unsurpassed for bedding and hedging purposes. *Hardy* Yellow Roses are scarce; hardy everblooming yellows are scarcer still. This new variety is similar in all respects to the original Crimson Baby Rambler excepting color. We own and control the entire stock. The name is fully protected and colored plates, circulars, advertising matter can be supplied.

Write for prices for this season's delivery

Jackson & Perkins Company  
Newark, Wayne Co., New York State

## BOBBINK & ATKINS

### World's Choicest Nursery and Greenhouse Products

EVERGREENS and CONIFERS, in several hundred kinds and varieties	PALMS and BAY TREES by the thousands
ROSES, in all kinds and varieties	FRUIT TREES, home-grown, imported, DWARF and TRAINED
RHODODENDRONS, Hardy, ENGLISH HYBRIDS, Maximum and Catawbiense	SMALL FRUITS, in all kinds and varieties
BOXWOOD, in all shapes, forms and sizes	NUT TREES, profitable kinds
HARDY AZALEAS, in all colors and varieties	OLD-FASHIONED, Hardy FLOWERING PLANTS, in thousands of kinds and varieties
HEDGE PLANTS, in all popular kinds	PAEONIAS, IRIS, PHLOX FERNS, and HARDY GRASSES
FLOWERING SHRUBS, in bush and standard forms in hundreds of kinds and varieties	KITCHEN HERBS and ROOTS
SHADE TREES, in hundreds of useful and attractive varieties	RUTHERFORD PARK LAWN GRASS SEED
MAGNOLIAS and other FLOWERING TREES	AUTUMN BULBS, Dutch, French and Japanese kinds
WEeping and STANDARD TREES, in many varieties	Interior and Exterior DECORATIVE PLANTS, in a large variety
JAPANESE MAPLES, in all varieties and colors	PLANT TUBS, in all shapes and sizes. Ask for special list
HARDY TRAILING VINES and CLIMBERS	VISITORS to our nurseries are always welcome
HARDY VINES and CLIMBERS in pots	SEND IN YOUR LISTS FOR QUOTATIONS
SPRING and SUMMER FLOWERING BULBS, ROOTS and PLANTS	

Nurserymen, Florists and Planters  
RUTHERFORD, N. J.

## BRIDGEPORT NURSERIES

OFFER A GENERAL ASSORTMENT  
OF NURSERY STOCK

Apple, Catalpa Speciosa Seedlings  
Shade and Ornamental Trees

IN LARGE QUANTITY

WRITE FOR PRICES

C. M. HOBBS & SONS  
BRIDGEPORT, IND.

# THE UNION NURSERIES, OUDENBOSCH, HOLLAND

OFFER A FULL LINE OF UPRIGHT GROWING DECIDUOUS TREES such as

## Norway Maples, Etc. SCHWEDLER

All grown at the MAPLE FARM, on new, strong ground, which produces a fine, vigorous growth, straight stems, fine fibrous roots. All sizes to offer for Spring shipment, from 4-5 feet whips to large calipered trees.

### Specialties

#### NORWAY MAPLES

4-5 feet	Whips
5-6 "	"
6-8 "	"
8-10 "	"
$\frac{3}{4}$ inch	caliper
$\frac{7}{8}$ -1 "	"
1 -1 $\frac{1}{4}$ "	"
1 $\frac{1}{4}$ -1 $\frac{1}{2}$ "	"
1 $\frac{1}{2}$ -2 "	"
2 -2 $\frac{1}{2}$ "	"

#### EUROPEAN LINDEN

4-5 ft.	6-8 ft.	8-10 ft.
1	-1 $\frac{1}{2}$ inch	caliper
1 $\frac{1}{2}$ -2	"	"
2	-2 $\frac{1}{2}$ "	"
and larger		

#### AMERICAN LINDEN

4-5 feet	6-8 feet
1	-1 $\frac{1}{2}$ inch caliper
1 $\frac{1}{2}$ -2	"
2	-2 $\frac{1}{2}$ "

#### SCOTCH ELM

5-6 feet	6-8 feet
1	-1 $\frac{1}{2}$ inch caliper
1 $\frac{1}{2}$ -2	"
2	-2 $\frac{1}{2}$ "

#### DBL. FL. THORNS

3-4 feet	4-5 feet
5-6 "	6-8 "

Rivers Purple Beech  
White Fl. Chestnut  
Tilia Dasystilla  
" Platyphilla

Flowering Apples,  
Etc., Etc.



Norway Maples at "The Maple Farm" of the Union Nurseries. Note the Vigorous Growth, the Straight Stems, the Fibrous Root System.

### Specialties

#### SCHWEDLER MAPLES

4-5 feet	Whips
5-6 "	"
6-8 "	"
$\frac{7}{8}$ -1 "	inch caliper
1 -1 $\frac{1}{4}$ "	"
1 $\frac{1}{4}$ -1 $\frac{1}{2}$ "	"
1 $\frac{1}{2}$ -2 "	"
2 -2 $\frac{1}{2}$ "	"

#### AMERICAN OAKS

4-5 ft.	5-7 ft.	7-8 ft.
1	-1 $\frac{1}{4}$ inch	caliper
1 $\frac{1}{4}$ -1 $\frac{1}{2}$	"	"
1 $\frac{1}{2}$ -2	"	"

#### HORSE CHESTNUT

4-5 ft.	5-6 ft.	6-8 ft.
1	-1 $\frac{1}{4}$ inch	caliper
1 $\frac{1}{4}$ -1 $\frac{1}{2}$	"	"

#### ORIENTAL PLANES

4-6 feet	6-8 feet
1	-1 $\frac{1}{2}$ inch caliper
1 $\frac{1}{2}$ -2	"
2	-2 $\frac{1}{2}$ "

#### SILVER LINDEN

6-8 feet	Trees
1	-1 $\frac{1}{2}$ inch caliper
1 $\frac{1}{2}$ -2	"
2	-2 $\frac{1}{2}$ "

Ulmus Wheatleyi  
" Flumosa  
Circidiphyllum  
Cytissus, Lab.  
Beech Many Var  
Birch " "  
Oaks " "  
Etc., Etc.

The Union Nurseries have always specialized on American orders. Their packing is carefully done and all stock is shipped as dug—no cellars or storage.

THE DUTY ON ALL ITEMS NOTED ABOVE HAS BEEN REDUCED FROM 25% TO 15% ADVALORUM

*For prices and full particulars refer to our American Agents*

## McHUTCHISON & CO., The Import House

17 MURRAY STREET, NEW YORK

When writing to Advertisers please mention The National Nurseryman

35TH YEAR  
**Pan Handle Nurseries**

WE OFFER A COMPLETE ASSORTMENT OF NURSERY STOCK CONSISTING OF

Apple	Poplar Carolina	Ampelopsis
Pear	Poplar Volga	Roses
Plum	Elm American	Evergreens
Cherry	Sycamores	California Privet
Peach	Mountain Ash	Buxus
Grape	Althea	Weeping Trees
Currant	Hydrangea	Catalpa Seedlings
Gooseberry	Barberries	Black Locust "
Small Fruits	Syringeas	Fruit Tree "
Maple Norway	Clematis	Catalpa Speciosa Seed.
Maple Schwedlers	Honey Suckle	Etc., Etc., Etc.
Maple Silver	Wistaria	

Our stock is well grown and graded. Prices are such that it will pay to investigate. Come and see us or write.

**J. K. HENBY & SON**  
GREENFIELD, IND.

**FOSTER-COOKE CO.**

Nurserymen

**Fredonia, N. Y.**

GROWERS OF

**Grape Vines, Gooseberries  
and Currants**

One and two years old. Graded up to the highest standard. Our stock for fall of 1913 never looked more promising than now. Write us for catalog. Send us your list of wants. Our prices are right, our stock A No. 1.

**WOOD LABELS**

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

**Dayton Fruit Tree Label Co.**

South Canal St., Dayton, Ohio

**The Framingham Nurseries**

200 Acres  
High Grade  
Trees, Shrubs,  
Evergreens,  
Vines, Roses,  
Etc.



Fine Stock  
of  
Rhododendrons  
Kalmias  
and  
Andromedas

Send for Price List.

**W. B. WHITTIER & CO.**  
Framingham, Mass.

WE OFFER FOR FALL 1913:

**Norway Maple Silver Maple  
and Carolina Poplar**

IN CAR LOTS ALL SIZES  
GET OUR PRICES

**The Greenbrier Nursery Co., Inc.**  
GREENBRIER, TENNESSEE

**SCARFF'S PLANTS**  
equal to any  
on the market

Small Fruit Plants our specialty for 25 years. 100,000 Transplanted Raspberry, Blackberry and Dewberry plants, fine for critical retail trade.

Currant, Gooseberries, Grapes, Horseradish, Asparagus, Rhubarb, etc. Hardwood cuttings and layers in large quantities. See our wholesale list before placing your order.

**W. N. SCARFF**

NEW CARLISLE, OHIO

**Evergreen Seedlings  
and Transplants**

FALL OR SPRING  
DELIVERY

LET US QUOTE YOU ON  
**TREE SEEDS**

**The North-Eastern Forestry Co.**

"WE RAISE OUR OWN TREES"

New Haven, Conn.

NURSERY AT  
Cheshire, Ct.

SEEDHOUSE AT  
Willsboro, N. Y.

**Fall, 1913 Spring, 1914**

WE OFFER

40,000 Duchess of Oldenburg Apple, 2 and 3-year  
60,000 1 and 2-year Apple in Grimes, Northern Spy,  
Baldwin, Wagner, Yellow Transparent, Maidens  
Blush and Stark. 5,000 2-year Keiffer Pear.

A large portion of the above will run in the heavier grades.  
150,000 Downing and Houghton Gooseberry Layers.  
Standard Grades. Low Prices.

**A. HAMILTON & SONS**  
BANGOR MICHIGAN



## Fumigation with Hydrocyanic Acid Gas Generated From Cyanide <sup>98</sup>/<sub>99</sub>%

Is the only positive eradicator of San Jose Scale and other Insect Pests. Endorsed by all agricultural experiment stations.

Manufactured by

**The Roessler & Hasslacher Chemical Co.**  
100 WILLIAM ST., NEW YORK

## FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

*OFFER for Fall 1913*

**GRAPE VINES**—One and two years old. Varieties largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all recleaned and guaranteed first class.

Correspondence solicited. Price list upon request.

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P. O. Address, Salisbury, Wicomico County, Md., R. F. C. 3  
Long Distance Phone and Telegraph, Salisbury, Md.

## WE OFFER

For FALL 1913

Grape Vines, Currants and Gooseberries  
in all varieties and Grades

—also—

Grape and Currant Cuttings and Light  
Grade of Vines for Lining Out  
in Nursery Rows

WRITE FOR PRICES

**F. E. SCHIFFERLI**, Fredonia, N. Y.

## Vincennes Nurseries

Vincennes, Ind.

W. C. REED, Prop.

We are pleased to offer for Fall, 1913,

**CHERRY**—Two Year. All leading sour varieties.

**CHERRY**—One Year. General list leading sorts sour and sweets.

**PEACH**—One Year. 30 varieties.

**APPLE**—Two Year. All grades.

**APPLE**—One Year. Cut Backs very strong.

**SILVER MAPLE**. All grades.

Can furnish the above in Carload Lots or less. Also Pear, Plum, Quince, Compass Cherry, Currants, Gooseberry, Catalpa Speciosa and ornamentals in good assortment.

Please submit list of wants for prices. Personal inspection invited.

## "Everything for the Nurseryman"

### COLORING PLATES

All kinds. Plate Books, Folios, Maps, Cards,  
Printed Forms, Circulars, and

===== PROMPT SERVICE =====

**Rochester Lithographing Co.**

22 Elizabeth St., Rochester, N. Y.

We are now ready to quote lowest prices on  
**FRUIT, SHADE AND ORNAMENTAL  
TREES, SHRUBS, EVERGREENS,  
VINES and HERBACEOUS  
PLANTS**

**FOREST TREE SEEDLINGS** we only have in limited supply  
this season, and would advise placing your orders early.

**TREE SEEDS** we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list  
ready end of September.

**The Willadean Nurseries**

SPARTA, KY.



## Strawberry Plants For Nurserymen

For over twenty years we have made a specialty of supplying Nurserymen in the Northern, Southern and Central parts of the country, growing varieties to suit the needs of each.

An immense stock of all the standard kinds, Klondike, Dunlop, Warfield, Lady Thompson, Excelsior, Missionary, etc., also the fancy table varieties.

Special low prices to the trade. Prompt shipment, and delivered as fresh as when dug.

**CONTINENTAL PLANT COMPANY,**

115 R. R. Street, Kittrell, N. C.

Largest Shippers of Strawberry Plants in the World.

# APPLE ROOT GRAFTS

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We put up Apple Root Grafts for the nursery trade. On orders placed early we make any style of Apple Root Grafts---whole root, piece root, or crown grafts, on either straight or branched roots, on No. 1 or No. 2 seedlings. Name the style and quantity wanted and let us make you a price. We are prepared to make strictly No. 1 grafts at very close prices. We dig our seedlings late, after they are thoroughly ripened; they are full of vitality and snap. : : : : :

IF YOU DO YOUR OWN GRAFTING,  
LET US FURNISH THE ROOTS

We will furnish you a quality that will bring better results, and we charge no more, than others.

F. W. WATSON & CO.

TOPEKA, KANSAS

APPLE AND PEAR SEEDLING SPECIALISTS

# The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

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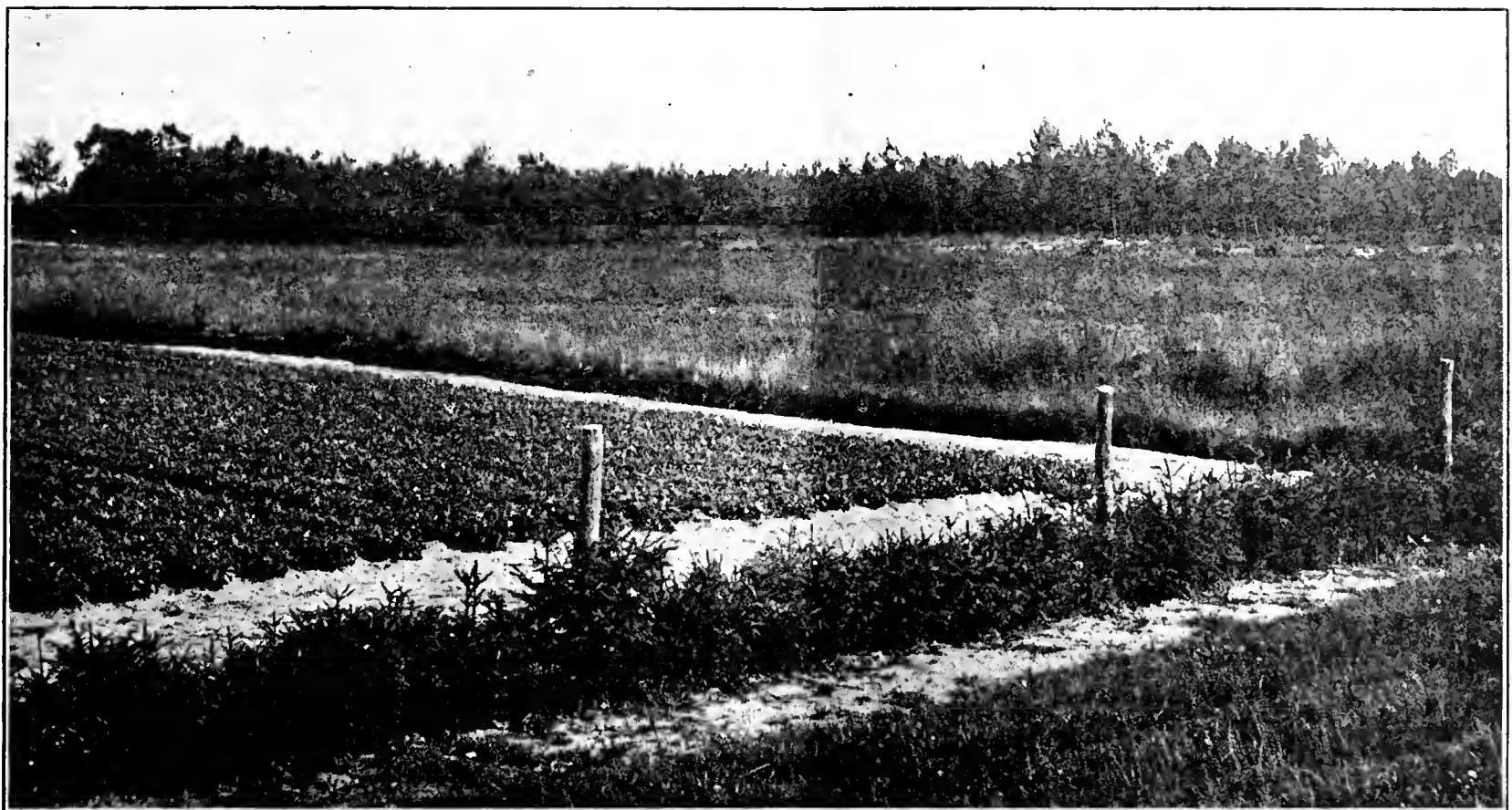
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## THE HOLLAND NURSERYMEN DO THINGS, TOO

### A STORY OF ACCOMPLISHMENT

On the main railway line running between Antwerp or Paris and Rotterdam, Holland, stands the little town of Oudenbosch, its population is not more than 2500 and it has nothing to entitle it to even local fame except perhaps

With this brief picture of local surroundings, you will agree that it is hardly the place to stage any story of modern achievement, yet that is just what I am going to write about, for progressive American nurserymen are interested in



THE BARE FIELD SHOWS THE NATURAL LAND AS IT WAS BEFORE THE SEEDLINGS WERE PLANTED IN MAPLE FARM OF UNION NURSERIES, OUDENBOSCH, HOLLAND

its cathedral—which is in size and splendor out of all proportion to the size of the town—and its nurseries, so it is easily understood that Oudenbosch is perhaps better known in the United States than in Holland, for its export trade in nursery stock to America is large, as well as to England, Germany and other countries also.

This little town has been a nursery center for the past 80 years—there are now perhaps 30 nurseries around there, large and small; three or four of them being large modern firms specializing in the export business. The soil around Oudenbosch is a dark, sandy loam, peculiarly suitable for the growing of upright deciduous trees, such as maples, oaks, lindens, planes, etc. The soil produces a fine fibrous root system and the long mild summer produces a vigorous growth with straight, smooth stems. This is the reason why fully 80 per cent of the Norway Maples five feet and over imported into the United States come from around this little town.

records kept of nursery achievement no matter in what part of the world it takes place.

The most progressive firm in Oudenbosch and the one having the largest acreage, largest packing sheds and largest export trade is the Union Nurseries, of which Mr. Henry Van der Bom is director. He is remembered by many of our readers as a practical, ambitious nurseryman, as he has made several visits to the United States in recent years.

Four years ago the Union Nurseries found it necessary to go afield for more acreage and at a more moderate price. It was impossible to buy enough land around Oudenbosch for this purpose, besides the price was too high and the soil around there had been "treed" too much. They finally located and bought 300 acres adjoining a small railroad station called Seppe, five miles from Oudenbosch which can be reached in about 15 minutes from Oudenbosch by automobile—for the nurserymen there use automobiles too.



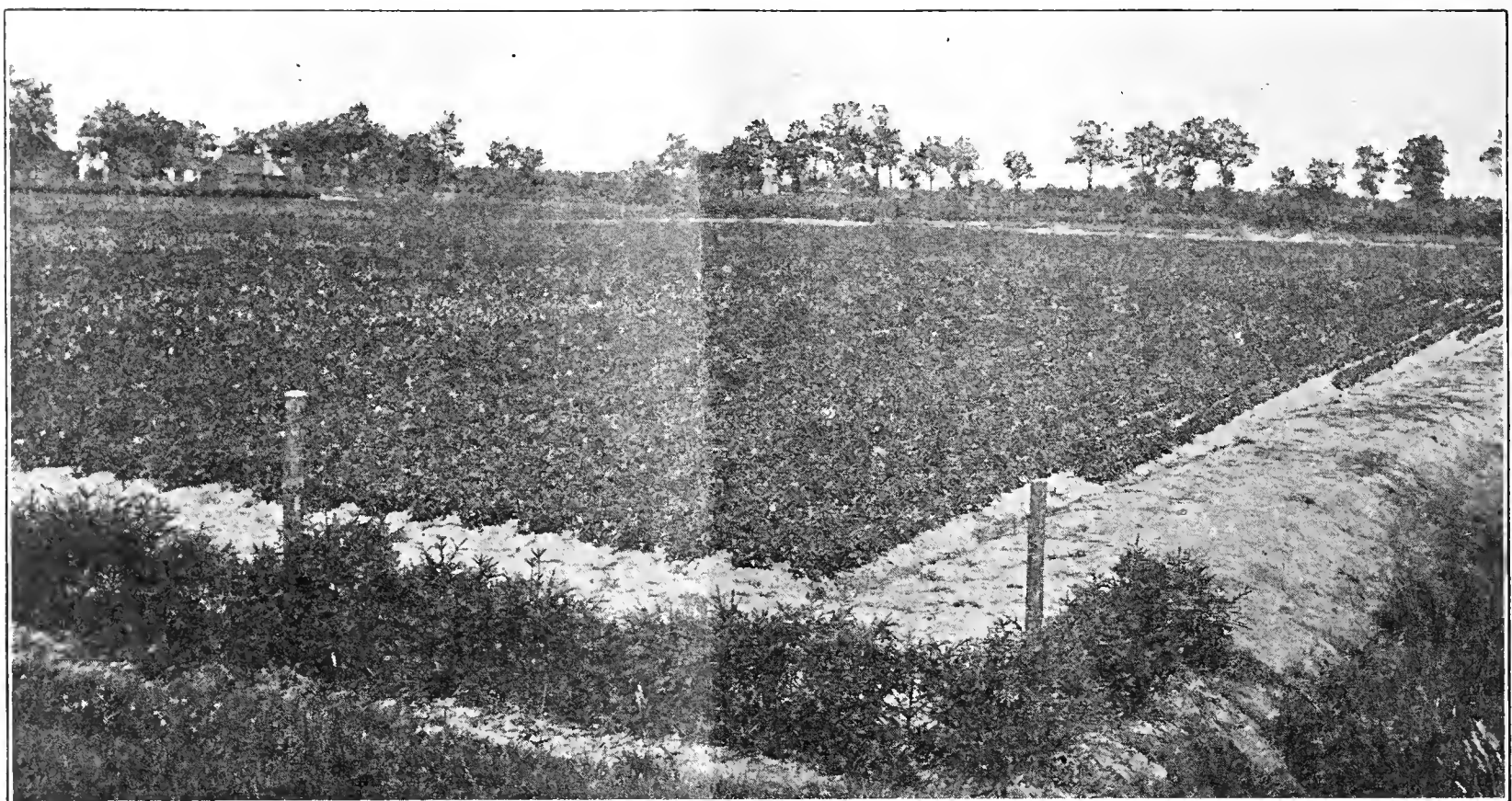
These 300 acres were then in their natural unproductive state, covered thickly with heather or scrub and with a few pines scattered here and there. As it was "sour-land" and considered worth very little, it had never been cultivated and friend Van der Bom had to take many a jibe from his colleagues for saying he was going to grow trees there; he couldn't even raise an umbrella on that land said some of them. Now there is as fine a block of 500,000 Norway Maples growing there as can be seen growing anywhere—but we must not get ahead of our story.

With the help of soil analysts and professional men employed by the Holland government to give free advice in such cases, it was learned that the soil for 18 inches down was sterile and valueless, but that underneath this there

no easy matter to get a railroad siding into the nurseries, but it was done—and now manure, lumber, moss and packing materials are brought right into the nurseries in carloads and the American shipments are loaded in cars for Rotterdam in the nurseries, as many as 30 solid carloads sometimes being shipped at one time.

The Union Nurseries still grow much stock in the Oudembosch home nurseries, but the experiment at the Maple-Farm has proved so successful that it will be largely extended in the near future and eventually everything will be moved there except the offices.

A large part of Holland has been reclaimed from the sea and is still below sea level. To encourage the Hollanders to reclaim land from the "sour-land" or from the sea, the



FIELD OF 7,000,000 SEEDLINGS, QUERCUS, AMERICANA, RUBRA, FAGUS, SYLVATICA, ETC., AT MAPLE FARM, AT UNION NURSERIES, OUDENBOSCH, HOLLAND

was three feet of good light colored sandy loam, five feet down was a layer of rock-sand which when broken up provided excellent drainage. The entire acreage was trenched by hand four to five feet deep, the subsoil was buried under the three feet of sandy loam, which remained on top. This was then treated with nitrogenous fertilizers which provided the missing elements required to get maximum results.

After laying fallow for some time, this "manufactured" land was planted with seedlings and the growth they made surprised everyone. There are now huge blocks of Norway Maples one and one-half to two inch caliper which were whips three years back. In another block there are seven million beech and oak seedlings. Every visitor is surprised to see the vigorous growth Norway Maples make here, some trees have made six feet of new growth this season with leaves 10 to 12 inches across. The sandy nature of the soil gives them a splendid fibrous root system.

The new place has been aptly named "The Maple-Farm." The railroads in Holland are government owned, so it was

Government offers prizes each year for the best products from these reclaimed lands. Last season the Union Nurseries took first prize at Breda for their exhibit of Norway Maples and American oaks from the Maple-Farm.

American visitors are always welcome at the Union Nurseries and Mr. Van der Bom or either of his two sons take pardonable pleasure in showing what will interest them; he and his sons speak English fluently. McHutchinson & Company, the New York Import House, have represented this firm as American agents since its inception.

Please find enclosed a one dollar bill for renewal of my subscription to your excellent paper. I read it with great interest and do not want to miss a single copy. Wishing you great success I remain,  
R. R. No. 2, Lancaster, O. W. A. ELLINGER.

Enclosed find check for \$1.00 to pay subscription for another year. Your valuable publication is *invaluable* to me, in other words *I must have it*.  
T. E. BURROUGHS.

# THE PROPAGATION OF NURSERY STOCK

By James Brodie, Biloxi, Miss.

When the Secretary of the Mississippi Nurserymen's Association assigned me the honor of introducing this subject, he opened up a wide field for thought. A field we cannot expect to walk round or over in the time limit before us. What I have to say must be restricted and confined to a few lines of stock such as may be of greatest interest to the farmer. In the daily toil of the farmer and horticulturist there is a link of connection between animal and vegetable

life that appeals to them, and once this line of thought is tapped there is a grafting of the whole. It is hard to convert ourselves into a vegetable, but it can be done in a way if you place life in a shell; deaf, dumb, blind, and, as far as we are aware, unconscious of feeling, but full of life and the power of growth—a gift to be handed by us and modeled according to treatment. In producing nursery stock the nurseryman avails himself of two methods of propagation, namely the sexual or simple method of production from seed, and the asexual, where increase is carried on by cutting, layer, offshoot or bulb; and again,

when he avails himself, of a combination of both; that is, by budding, or grafting the seedling.

We are all aware of the uncertain quantity and quality of fruit likely to be produced by fruit trees grown directly from seed, yet some of these productions are the foundation of superior fruit. On rare occasions a tree grown directly from seed produces a choice fruit, and it is from such rare developments the nurseryman is able, by budding or grafting, to perpetuate the strain indefinitely. By visiting any of our great fruit tree nurseries, the novice would be impressed (if they were pointed out) with the multitude of seedlings of apple, peach, pear, plum, cherry, pecan, etc.,

that would pass before the eye. Taking all the nurseries of the nation together the number of prospective fruit trees brought to life from seed is simply endless; an eager undisciplined multitude anxious to follow out their life-work.

All this uncertain element turned loose on the unsuspecting public for one year would be a national calamity, for out of all these millions, after years of care and toil, we would not be likely to get more than a few trees worthy of a place

in the present day fruit orchard. Before I leave this system of fruit production from seed let me take you back to the days of Young America when the simple art of grafting and budding was known to few. From England, and Europe generally, immigrants brought a few choice fruit trees, but it was from seed, probably imported or saved from first fruits in the new land that the bulk of their fruit trees came. The effect of change, the stimulating virgin soil, and the glorious ripening effect of our climate produced wonderful results. Early selections from these productions, and again selections



NORWAY MAPLES RUNNING FROM 8-10 FEET TO 1-1¼ CALIPER SIZES. THERE ARE 35,000 IN THIS BLOCK AT MAPLE FARM OF UNION NURSERIES, OUDENBOSCH, HOLLAND

from later developments, and we have the present day perfect and world-famed American red-checked apple, peach and plum.

On this foundation of toil, long waiting, much disappointment, and the few resulting select specimen fruits obtained, we have a distinctly national type of fruit; and thanks to the nurseryman, tree peddler, orchardist, rapid transit, our knowledge of cool storage and canning, our unparalleled success and fabulous values in fruit products.

Once more let us review our present day endless fields of seedlings. Before you pass millions on millions of plants that, left alone, would develop worthless lives encumbering



the land. As they pass you get a vivid illustration of what budding and grafting does for them. To the great seedling world this introduction of bud or graft from improved varieties reminds us of a grander truth spread abroad on heathen, or uncivilized man: "The ingrafted word, which is able to save your soul." St. James, who uses this expression, must have been a good grafter and well acquainted with the art of converting seedlings from their natural wildness and the error of their way to perfect fruit trees. St. Paul was another up-to-date grafter. In his epistle to the Romans, he shows his perfect knowledge of the art when he makes reference to grafting the wild olive into the good, which he says, was "Contrary to nature." He also knew his hearers, or rather the readers of his instructions, would appreciate so familiar an illustration.

Let me now call your attention to the inserted bud or graft in its development to a tree. The first operation is to cut off the seedling growth close to the bud, then the inserted bud is forced into growth, and with it many adventitious buds that lie unseen in the seedling stock. These sprouts require to be removed and kept under till the desirable bud has got a complete hold of the situation and is able to take care of all the root power. Here again we have a remarkable illustration of the struggle that goes on in the lives of those who make up their minds to turn over a new leaf; making the decision to reform is easy, but it takes careful watching to repress all the old habits that lie in the stock. They require careful rubbing off, or the good is drowned out and the whole goes to the brush pile. Of grafting Shakspeare says:

We marry a gentle scion to the wildest stock;  
This is an art which does mend nature,  
Change it rather; but the art itself is nature.

The nurseryman is ever impressed with the wonderful growing effect produced by the introduction of this bud or graft of improved type. Left alone, or as it appears in the nursery row, the young seedling is often, or nearly always as full of little or great ailments as human life. The baby

leaf-growth is especially tender and liable to rust, mildew, insect attack and a host of evils, but once over the baby stage, there is a change of foliage in nearly all trees: a putting away of childish things. With age, the tree perfects its foliage and probably the leaves adapt themselves to greater effort for promoting growth and perfecting fruit. No doubt all of you have noted this leaf change. In the pecan it is specially marked. The leaf of the bearing pecan stands out in marked contrast to the undeveloped seedling. Here the nurseryman in his art of grafting gains a march on creation by taking branches from trees of fully developed foliage and fruit and uniting them with strong, thrifty seedling stocks of double value. Practically he places an



NORWAY MAPLES RUNNING FROM 1¼ to 1½" CALIPER.  
Note the root system at Maple Farm of Union Nurseries, Oudenbosch, Holland.

old head on young shoulders. At short notice he has converted the worthless weedy element into a tree of known and certain value.

What is true of one tree is a fair guide to others. Personally I come from the great adopted land of the pecan, and will for a few minutes direct your attention to its propagation from seed. There is not a doubt but that we obtained our present superior nuts without effort on our part. We have no great government agent or scientist criss-crossing



them and telling us of his wonderful achievements. They came to us as the direct gift of what we may call evolution—that wonderful unknowable power within life, that takes, in its own good time, a step forward in great nature's constructive work. Let me here remind you of generations long passed away to whom we are indebted.

The old time Mississippi, Texas, or Louisiana planters returning to their winter or summer camps by the sea must have carried with them small quantities of their best nuts, and, no doubt, planted some in their gardens. From these trees sprang and spread thousands on thousands of trees.

merit count, that is trees bearing nuts of marked size and quality such as have found a place in our price lists, could be restricted to a dozen, and the origin of most of these to the Jackson Company coast-line.

Since coming to the coast, some 20 years ago, I have given some time to the search for nuts of special merit—I mean nuts that would be classed worthy of propagation. Excluding varieties already well known, only one such has turned up. To the nurserymen in this restricted district—say from Seranton on the east, Mississippi City on the west and Ocean Springs in the center, the public are indebted for a



NORWAY MAPLES RUNNING FROM 8 TO 10 FEET TO 1 TO 1½ INCHES CALIPER. PART OF BLOCK 30,000 TO 40,000 AT MAPLE FARM, OF UNION NURSERIES, OUDENBOSCH, HOLLAND

They attracted little attention, and for a long time their merit was held under. Nurserymen were skeptical; but year after year the nuts attracted attention. Propagation was attempted by amateur growers, with varying success for there was much to learn about the propagation of this tree not common to others, but little by little the truth came to light, and the improved pecan nut was born.

Professional nurserymen took the matter up, and today we face a growing and pressing demand for the finest edible nut in the world. The Pecan nut has come to us along the hard road of suspicion, criticism and varied report. But it stands with us today a great gift of priceless value—a marked illustration showing superior results attained in the development of a fruit removed from its natural or original habitat.

Now let me press on you the fact that out of unknown thousands of trees scattered along the gulf coast the actual

conservative care and restriction to merit in the selections propagated that could not be surpassed.

I am proud to know these nurserymen, as men who would scorn any expression or act that would induce the novice to plant a tree of unknown merit. Everyone now planting a pecan orchard must plant the best budded or grafted sorts. Still we who have reaped the benefit of so much seed planting should not altogether condemn the planting of selected known-seed—remember, I do not recommend the planting of seed or seedling trees for orchard purposes, for it has brought a world of trouble to many who have; only this: where a seedling can grow undisturbed give it a chance to show its merits before removing, or top grafting.

In our eager effort to promote the spread of improved trees, we should not overlook the value, quantity and quality of our lesser coast seedlings; as a whole they are far superior in size and quality to the general average of seedling nuts

found elsewhere. Some of these trees represent the owners a money investment of several hundred dollars.

Our experience with the pecan is conclusive evidence to me that improvement comes to us along lines of long established type, and not by mixing up types far removed. In my illustration of seed selection by the first settlers in the East and our old coast residents or campers, we have overwhelming evidence of the working of a power far beyond our grasp. Great nature is ever encouraging us to better effort and care of her gifts, and seems to delight at rare intervals in surprising us with gifts far beyond expectation. Human

life-work devoted to horticultural research deserves all the honor and praise we give it. But behind all we see in this lesson of Pecan development in which man took no conscious part, beyond planting the seed, a reminder that nearly all our fruits and seeds of first merit that have stood the test of time came to us in the same way.

Think of it as you may we are, at the present, more indebted to chance developments in our gardens, fields, fence rows and waste places for improvements, in nuts and fruits than we are to the best efforts of scientific man. In other words: To God, be all the praises for his countless gifts!

## A SUMMARY OF STATE INSPECTION LAWS

By Courtesy of Calvin J. Huson, Commissioner Department of Agriculture, New York.  
Prepared by George G. Atwood

**ALABAMA.**—A signed copy of the inspection certificate issued to the applicant must be filed with the State Horticulturist and money sent to pay for the license and tags needed. A tag must be placed on each order delivered. One tag on box does not cover individual orders therein. No one is allowed to receive a package of nursery stock unless a tag is attached.

Every nursery or nurseries, dealer or dealers in Alabama and all outside of State nursery or nurseries doing business in Alabama shall be required to take out a license before a certificate of inspection is granted. The license shall be of two kinds: one regular nurseryman and dealer's license and an agent's license, the agent's license to be obtained only through the principal, who must hold a regular nurseryman's or dealer's license. The license fee for each nurseryman's or dealer's license shall be \$10. The fee for each agent's license shall be \$1. All license fees to be paid before the license is granted. This rule to take effect on July 15, 1913.

Address all communications to State Horticulturist, Auburn, Alabama.

**ARIZONA.**—Dr. A. W. Morrill, State Entomologist of Arizona, Arizona Commission of Agriculture and Horticulture, Phoenix, Arizona.

**ARKANSAS.**—Shipments of nursery stock into the State must be accompanied by a copy of the valid certificate of inspection, a copy of the valid permit issued to the nurseryman by the State Entomologist of this State and must bear the name and address of the consignor and consignee with a statement of the contents of the shipment; all shipments not so labeled or tagged must be refused for shipment by the carrier. Carriers bringing into the State shipments of nursery stock which originated in foreign countries or foreign possessions of the United States must notify the State Entomologist in writing and must hold such stock at any place designated by him until the same has been duly inspected and released.

Nurserymen located out of the State may secure permits by filing with the State Entomologist a copy of their certificate. Geo. G. Becker, Acting State Entomologist, Fayetteville, Ark.

**CALIFORNIA.**—Shipments of nursery stock into California are held by the transportation companies until inspected by State quarantine guardians. All packages must be marked with the name and address of the shipper, name of the consignor and name of the place where the stock is grown. All nursery stock infested with pests not existing in California will be immediately sent out of the State or destroyed at the option of the owner and at his expense. Peach, apricot and almond trees coming from districts where yellow and rosette are known to exist shall be refused entry and shall be destroyed or returned to the shipper. Notices of shipment of nursery stock to California should be sent to the horticultural quarantine officer, Room 11, Ferry Building, San Francisco, Cal., and to the State quarantine guardians at the point of destination. Frederick Maskew, Chief Deputy Quarantine Officer, Room 11, Ferry Building, San Francisco, Cal.

**COLORADO.**—The State Entomologist has general supervision of the inspection of nurseries and orchards to prevent the introduction and spread of injurious insects and plant diseases. County horticultural inspectors in fruit-growing counties of the State are appointed by the county commissioners. All nursery stock coming into the State must bear certificates of inspection and fumigation and on arrival in counties that have inspectors is turned over to them and released to consignee if it passes inspection. C. P. Gillette, State Entomologist, Fort Collins, Colo.

**CONNECTICUT.**—"All nursery stock shipped into this State shall bear on each package a certificate that the contents of said package have been inspected by a State or government officer and that said contents appear free from all dangerous insects and diseases. If nursery stock is brought into the State without such a certificate, the express, freight, or other transportation company or person shall, before delivering shipment to consignee, notify the State Entomologist of the facts, giving name and address of consignee, origin of shipment, and approximate number of cars, boxes, or packages, and probable date of the delivery to the consignee. The State Entomologist may cause the inspection and if infested the treatment of the stock. No person, firm, or corporation shall unpack any woody field-grown nursery or florists' stock brought into this State from foreign countries except in the presence of an inspector, unless given permission to do so by said State Entomologist or one of his deputies. If such stock is found infested with any dangerous pests the State Entomologist may at his discretion order it treated. Any person violating any of the provisions of this act shall be fined not more than \$50." Dr. W. E. Britton, State Entomologist, New Haven, Conn.

**DELAWARE.**—Shipments of nursery stock into the State must bear a certificate of inspection and also a certificate stating that the stock has been properly fumigated. All nursery stock not accompanied by proper certificates may be held by the transportation companies until it can be inspected. Wesley Webb, Secretary, State Board of Agriculture, Dover, Del.

**FLORIDA.**—All shipments into the State shall have attached to each package a certificate stating that the contents have been stripped of foliage and fumigated as per rules and regulations. All persons selling nursery stock without the State shall pay a fee of \$5 per annum and register with the inspector of nursery stock, file a certificate of inspection and receive permission to sell nursery stock in the State. It is declared unlawful to knowingly sell or transport any infested or infected nursery stock in the State. Rules and regulations may be obtained by addressing E. W. Berger, Inspector of Nursery Stock, Gainesville, Fla.

**GEORGIA.**—Nurseries are inspected annually. A signed duplicate of inspection certificate, together with a statement by the nurserymen that all stock intended for Georgia will be fumigated in accordance with directions furnished them, must be filed in the office of the State Entomologist. Official tags of the Georgia State Board of Entomology will be



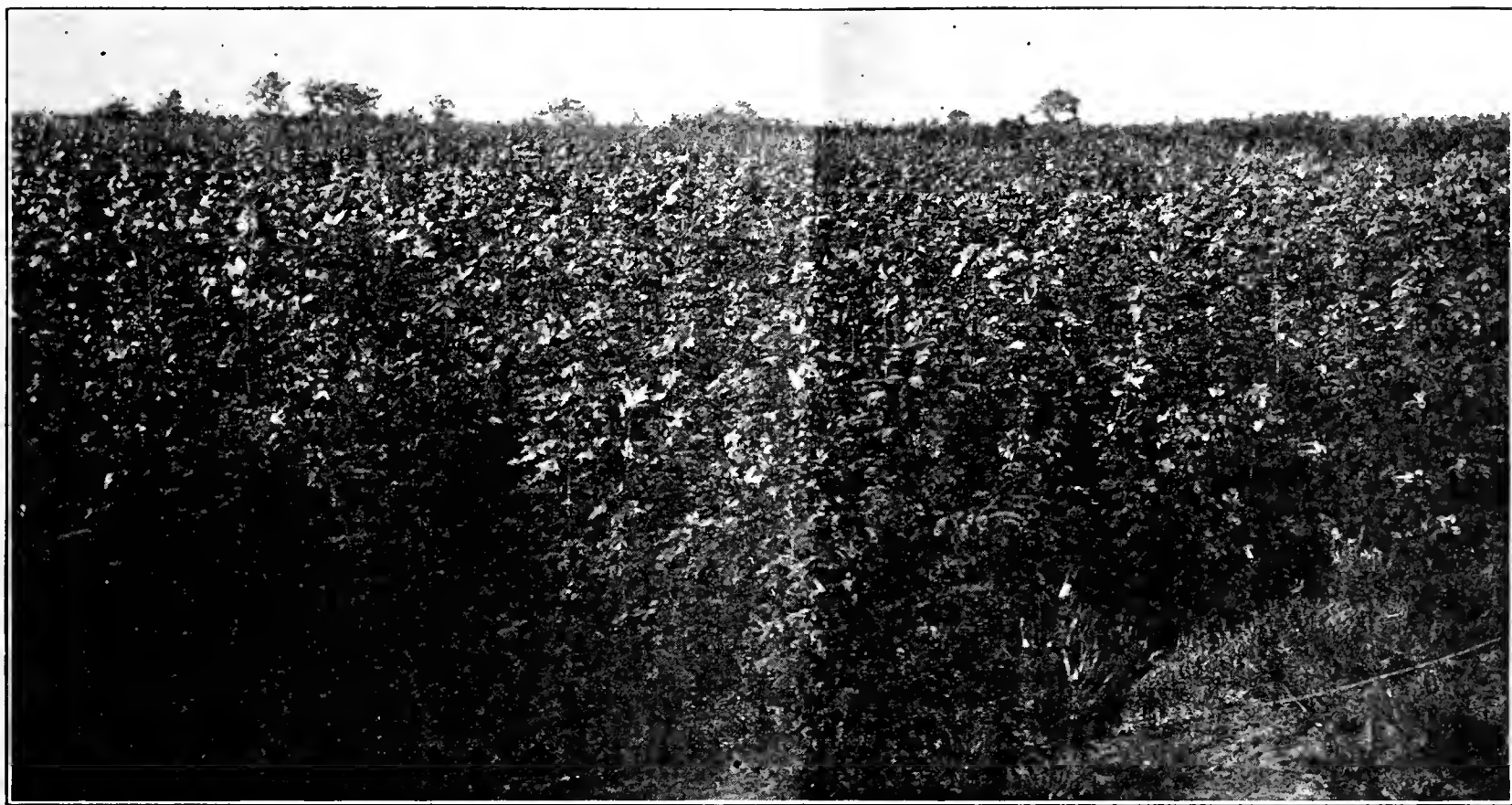
furnished by the State Entomologist at the following price: One hundred tags, 60 cents, postpaid; 200 tags, 85 cents, postpaid; 300 tags, \$1.10, postpaid; 500 tags, \$1.35, sent by express, collect; 1,000 tags, \$2, sent by express, collect. Each shipment of nursery stock into the State of Georgia must bear the official tag of the Georgia State Board of Entomology and also a duplicate certificate of inspection of the State from which the shipment is made. E. L. Worsham, State Entomologist, Atlanta, Ga.

**IDAHO.**—No person, firm or corporation shall import or sell nursery stock without first applying to the State Board of Horticultural Inspection and filing a bond in the sum of \$5,000 and securing annual license upon payment of \$10. Shipments into the State should bear a copy of an official certificate of fumigation emanating from the place where the stock was grown. All shipments into the State must bear a label showing the name of the shipper, the locality where grown and variety of nursery stock. All nursery stock, fruit trees or horticultural plants sold

consider advisable. Stock sent into or within the State must be plainly labeled with the name of the consignor and the consignee and must bear a certificate signed by a State or government official showing that the inclosed stock has been inspected and found free from injurious insects and plant diseases. All foreign-grown stock must be inspected upon arrival at its destination in Indiana. C. H. Baldwin, State Entomologist, Indianapolis, Ind.

**IOWA.**—State nurseries are inspected at owner's request or if supposed to be infested with dangerously injurious insects or plant disease, and nurserymen are prohibited from selling or shipping without inspection. Shipments into the State must be accompanied by a certificate of apparent freedom from injurious insects or plant diseases. A copy of inspection certificate must be filed with and approved by the State Entomologist. Prof. H. E. Summers, State Entomologist, Ames, Ia.

**KANSAS.**—Nurseries are inspected annually between June 15 and November 1. Certificates are valid until the first day of the following



PART OF BLOCK OF MORE THAN 100,000 NORWAY MAPLES 4 TO 5, 5 TO 6 AND 6 TO 8 FOOT SIZES AT MAPLE FARM, OF UNION NURSERIES, OUDENBOSCH, HOLLAND

or delivered by principal or agents shall be true to name and variety as represented. All nursery stock shipped into this State, whether bearing certificate of inspection or not, must be inspected again upon its arrival, the consignee paying for such inspection. Every nursery firm doing business in this State must pay annually \$1 additional for each agent who represents them. J. U. McPherson, State Horticultural Inspector, Boise, Idaho.

**ILLINOIS.**—State nurseries are inspected and certified not later than October 1. An inspection certificate shall be valid for one year from date of inspection. The State Entomologist is authorized to revoke a certificate if he finds it is being used in violation of the law. He is also required to furnish all Illinois nurserymen with a list of State and government inspectors whose certificates may be received as equally valid as his own, and the nurseryman receiving stock under such certificates is authorized to substitute for them the Illinois certificate of inspection. Each dealer in nursery stock who has no nursery of his own and each agent for a nursery located outside of Illinois is required to furnish to the State Entomologist annually a sworn statement, showing that the stock in which he deals has been duly inspected and to submit for approval a copy of the certificate of inspection. Nursery stock shipped into the State must bear a certificate of inspection attached to each car, box, bale, bundle or package. Dr. S. A. Forbes, State Entomologist; P. A. Glenn, Chief Inspector, Urbana, Ill.

**INDIANA.**—All nurseries are inspected between June 1 and October 1 and at such other times as the head of the inspection department may

June. No nursery stock shall be brought into the State nor offered for sale within the State without having been properly inspected as shown by an accompanying certificate. State Entomological Commission, Topeka, Kan. Prof. Geo. A. Dean, Entomologist, Manhattan, Kan. Prof. S. J. Hunter, Entomologist, Lawrence, Kan.

**KENTUCKY.**—Nurseries are inspected annually. Every package of nursery stock shipped into the State must have a copy of a certificate of inspection attached and bear on the label a list of the contents. Duplicate certificates of inspection may be filed with the State Entomologist. Prof. H. Garman, State Entomologist, Lexington, Ky.

**LOUISIANA.**—Nursery inspection is under the control of the State Board of Agriculture and Immigration. The entomologist of the experiment station will have charge of the work, so all communications concerning nursery inspection should be addressed to him.

The regulations of the Board require every box, bundle, bale or package of nursery stock shipped into the State to be plainly labeled with a copy of a valid and unexpired certificate of inspection, and nurserymen shipping stock into this State must file a copy of their certificate with the Board. J. B. Garrett, Entomologist, State Board of Agriculture and Immigration, Baton Rouge, La.

**MAINE.**—Nurseries within the State are inspected annually. All nursery stock shipped into the State shall bear on each box or package a certificate that the contents have been inspected. The State Horticulturist has power to inspect all stock shipped into the State at point of destination, whether under certificate or not, and if found infested with

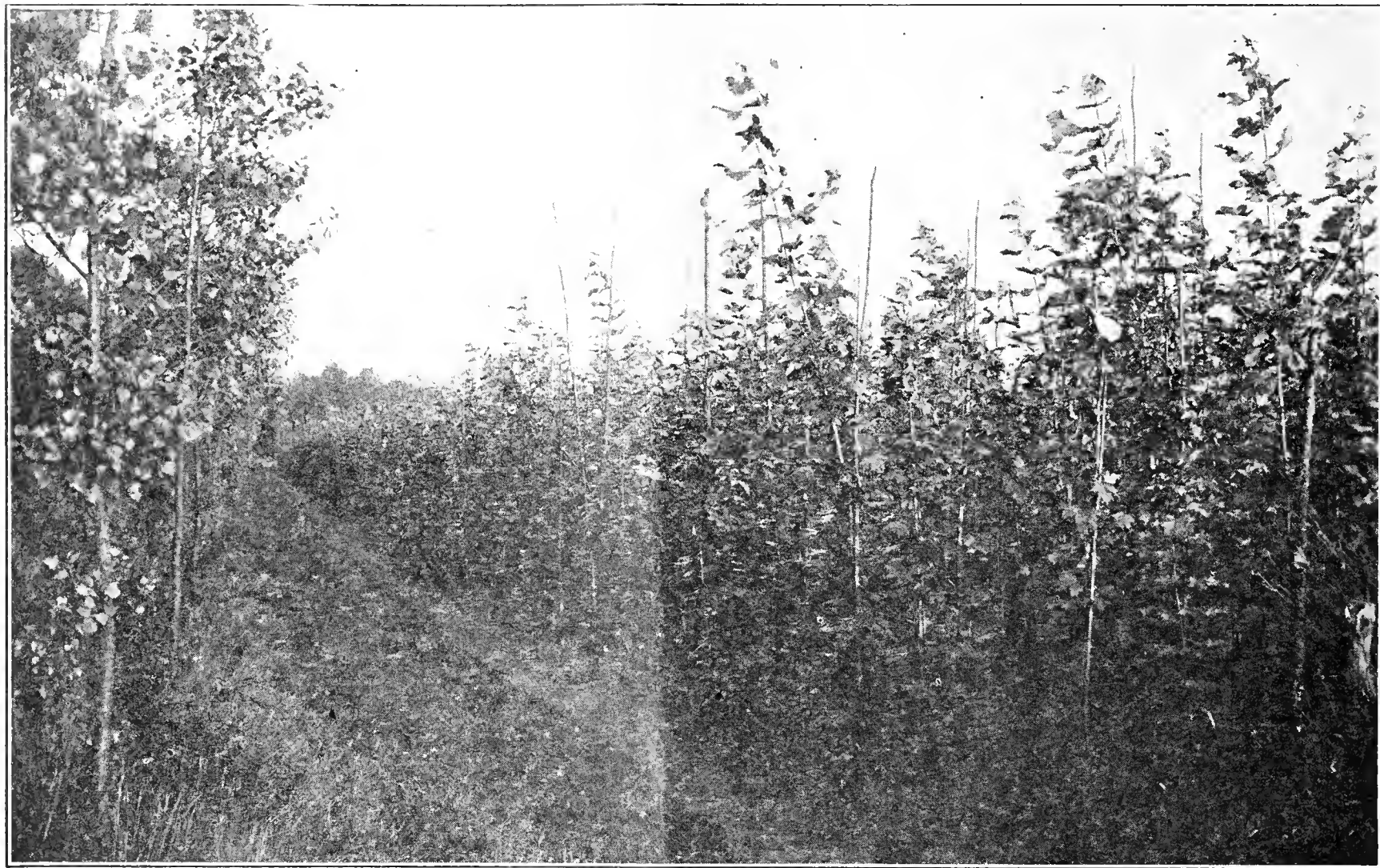


any injurious insects or plant diseases he shall cause it to be destroyed or returned to the consignor. Agents or other parties, excepting growers, who sell or deal in nursery stock, or solicit purchases of nursery stock, shall make application for an agent's license and shall file with the State Horticulturist name and location of nursery and place of business of the nurserymen or tree dealers whom they represent or from whom they purchase their stock. Such application shall be accompanied by a fee of \$5. A. K. Gardner, State Horticulturist, Augusta, Maine.

MARYLAND.—Nurseries are inspected at least once in six months. All nursery stock subject to attack of insect pests must be fumigated. Shipments into the State must be labeled with the name of consignor and consignee and each package bear a certificate of inspection. Duplicate certificates should be filed with the State Entomologist. Dr. T. B. Symons, State Entomologist, Prof. J. B. S. Norton, State Pathologist, College Park, Md.

statement of contents and a certificate showing that the contents have been inspected by a State or Government officer, and if of species subject to the attack of San José scale must be fumigated with hydrocyanic acid gas. Certificates of fumigation must also be attached, together with a certificate of inspection. This applies to individual orders when several are contained in the same shipment. All nurserymen, whether residents of Michigan or other States, who wish to grow or sell stock within the State must apply to the State inspector of nurseries on or before August 1 of each year for a license, for which the fee is \$5.00. A bond for \$1,000 must also be filed. Certificates of inspection must be filed with the State inspector of nurseries before any stock is shipped into the State. Prof. L. R. Taft, State Inspector of Nurseries, East Lansing, Mich.

MINNESOTA.—Inspection, annual compulsory. Inspection may be oftener if it seems desirable.



PART OF BLOCK OF NORWAY MAPLES 7 TO 8 FEET, 1 AND 1¼ INCH CALIPER SIZES, AT MAPLE FARM OF UNION NURSERIES, OUDENBOSCH, HOLLAND

MASSACHUSETTS.—Nurseries in the State are inspected annually. Agents or other persons, excepting growers who desire to sell nursery stock in the State, shall make application to and receive from the State Nursery Inspector an agent's license, and shall file with the State Nursery Inspector names and addresses of all persons or nurseries from whom they purchase stock. It shall be unlawful for any person, firm or corporation to sell, deliver or ship within the State any nursery stock unless such person, firm or corporation holds a grower's certificate or an agent's license, and a copy of such certificate or license must accompany each car, box or package delivered or shipped.

The State Nursery Inspector shall have power to inspect at its point of destination all nursery stock coming into the State, and should such stock be found to be infested with injurious insects or plant diseases he may cause it to be destroyed, or treated or returned to the consignor at the consignor's expense. Dr. H. T. Fernald, State Nursery Inspector, Amherst, Mass.

MICHIGAN.—Nurseries are subject to inspection; infested trees must be destroyed and the remainder of the stock within a half mile must be fumigated. Shipments into the State must bear on every package, plainly labeled, the name of the consignor and consignee,

Shipments into the State must be accompanied by a certificate of inspection.

Carrying companies accepting stock not so tagged are responsible and liable to prosecution.

Dealers in other States sending stock into Minnesota for sale must file a copy of their certificates with the State Entomologist. Professor F. S. Washburn, State Entomologist, St. Anthony Park, Minn.

MISSISSIPPI.—Every nursery in the State must be inspected before November 1 of each year, and every bundle, bale or package of stock sold or transported must be accompanied by a copy of the certificate of inspection attached in a conspicuous place. Every person or firm from other States wishing to ship nursery stock into Mississippi must file with the entomologist a copy of their certificate which shall state that the nursery is properly equipped for fumigating all nursery stock. A copy of the certificate shall be attached to every bundle, bale or package of nursery stock delivered within the State. Every nurseryman must state that all nursery stock shipped into this State will be fumigated with hydrocyanic acid gas. R. W. Harned, Entomologist, Agricultural College, Miss.

**MISSOURI.**—Nurseries are inspected annually. Each nursery outside of Missouri shipping stock into Missouri must apply at the office of the Chief Inspector for a permit which will be issued upon filing the necessary papers and copy of their nursery inspection certificate. No fee is charged for the permit. All agents or salesmen for outside nurseries must apply for an agent's permit. Every package of nursery stock shipped into the State must be clearly labeled with the name of the consignor, consignee, statement of contents and a certificate showing that the stock therein contained has been inspected where grown by a duly authorized inspector and found to be apparently free from dangerously injurious insect pests and plant diseases. Transportation companies are not permitted to deliver nursery stock unless so labeled. Leonard Haseman, Entomologist and Chief Inspector, University of Missouri, Columbia, Mo.

**MONTANA.**—All stock brought into the State must be unpacked, inspected and fumigated if necessary at one of the designated quarantine stations, viz.: Glendive, Miles City, Billings, Bozeman, Lewistown, Helena, Great Falls, Missoula, Victor, Como, Darby, Plains, Mondak,

fumigated with hydrocyanic acid gas, using not less than  $\frac{2}{10}$  of 1 gram of cyanide of potassium per cubic foot of space, in an air-tight compartment for not less than 40 minutes. A copy of the certificate of inspection or a copy of the affidavit must be attached to each car, box or package shipped into the State. Commissioner of Agriculture, Durham, N. H.

**NEW JERSEY.**—The law requires the inspection of all nurseries at least once in each year. Shipments into the State must be accompanied by a certificate of inspection, or copy thereof, attached to each car or parcel, together with a statement from the shipper that the stock therein is a part of the stock inspected, and stating whether such stock has been fumigated with hydrocyanic gas or not. It shall be the duty of all carriers to refuse for transportation within the State all stock not accompanied by a certificate of inspection.

All stock coming into the State may be detained for examination, wherever found, by the State Entomologist or the State Plant Pathologist, and if found to be infested with any insects or plant diseases, injurious or liable to become so, will be destroyed. Dr. T. J. Headlee,



FINE, STRAIGHT TREES OF NORWAY MAPLES, 8 TO 10 FEET, 10 TO 12 FEET, 1 TO 1¼ AND 1¼ TO 1½ INCH CALIPER SIZES, AT MAPLE FARM OF UNION NURSERIES, OUDENBOSCH, HOLLAND

Glasgow, Havre, Kalispell, and Eureka. Nursery stock may be inspected and fumigated at other points of delivery on payment of all costs. To sell or deliver nursery stock it is necessary to first obtain a license by paying a fee of \$25 and by filing with the State Horticulturist a bond in the sum of \$1,000 annually. All correspondence and notice of shipment, including an invoice of stock, must be sent to M. L. Dean, State Horticulturist, Missoula, Mont.

**NEBRASKA.**—All nursery stock shipped into the State shall be labeled with the names of consignor and consignee and a certificate showing inspection since July first preceding. Prof. Lawrence Bruner or Prof. Myron H. Swenk, Assistant State Entomologist, University of Nebraska, Lincoln, Neb.

**NEVADA.**—Nursery stock shipped from other States shall bear on the outside of each car, bale or package a label giving the names of the consignor and consignee, together with a copy of an inspection certificate of recent date. Such certificate of inspection must bear the signature of a qualified person in authority in the State in which such nursery stock was grown. No transportation company shall deliver any nursery stock lacking such official certificate of inspection. J. E. Stubbs, President, State University, Reno, Nev.

**NEW HAMPSHIRE.**—Nurseries are inspected at least once each year. Shipments into the State must be accompanied by a certificate of inspection or, in lieu thereof, an affidavit showing that the stock has been

State Entomologist, New Brunswick, N. J., State Plant Pathologist, New Brunswick, N. J.

**NEW MEXICO.**—No law relative to transportation of nursery stock. The Territorial Legislature of 1903 provided for county boards of horticultural commissioners which were given authority to control orchard pests. Prof. Fabian Garcia, Horticulturist, Agricultural Experiment Station, State College, N. M.

**NEW YORK.**—All growing nursery stock in the State will be inspected annually or oftener if necessary; if found free from injurious insects or fungous disease there will be issued to the owner a certificate of inspection, which certificate will expire September 1, 1914.

Every car, box, bundle or package must have attached an exact copy (including date of issue and date of expiration) of said certificate before shipment or delivery.

All nursery stock found growing within one-half mile of areas infested with San José scale must be properly fumigated as required by the regulations of this Department before shipment or delivery.

No nursery stock received from points within the State of New York shall be sold or delivered unless it bears a valid certificate of inspection on arrival.

Any nursery stock brought into the State must remain packed and unopened until permission is given by the Commissioner of Agriculture or his duly authorized representative. To facilitate rapid inspection,



receivers of nursery stock should notify the Department office at Albany or an authorized inspector of the receipt or expected receipt of consignments, giving the name and address of consignor and dates.

No nursery stock shall be shipped or delivered unless there is positive evidence that it has been inspected and certified by authority of the Commissioner of Agriculture.

**NORTH CAROLINA.**—Every shipment of nursery stock into this State must be accompanied by a valid copy of a certificate of inspection. Every person, firm or corporation desiring to ship nursery stock into this State must file a copy of their certificate with the entomologist. It will be of advantage to the nurserymen if they attach a guarantee of fumigation to the shipment. A copy of regulations will be sent on application. Franklin Sherman, Jr., Entomologist State Department of Agriculture, Raleigh, N. C.

**NORTH DAKOTA.**—The director of the Experiment Station is authorized to cause inspection and prescribe treatment of diseased nursery stock. Shipments into the State must bear a certificate of inspection. Every person who employs agents or salesmen or who solicits for the sale of nursery stock must obtain a license upon the payment of \$10 and upon filing a certificate of inspection and a \$500 bond. Said license will permit holder to do business in the State for one year. Director North Dakota Experiment Station, Agricultural College, N. D.

**OHIO.**—Shipments of nursery stock entering the State must bear the name of the consignor and consignee and be accompanied by an official certificate of inspection or fumigation. Agents are required to pay a license fee of \$1 and dealers a license fee of \$5, also to file sworn statements that the stock which they sell or deliver has been officially inspected and was received by them accompanied with a valid certificate of inspection or fumigation. N. E. Shaw, Chief Inspector, Ohio Department of Agriculture, Columbus, O.

**OKLAHOMA.**—Nurseries are inspected annually. No nursery stock shall be brought into the State without having been previously properly inspected as shown by an accompanying certificate. Benjamin Hennessey, Secretary, State Entomological Commission, Oklahoma City, Okla.

**OREGON.**—The State Board of Horticulture has charge of inspection within the State. All nursery stock brought into the State must be inspected at station of delivery before delivery to consignee. If found infected or infested, nursery stock must be returned to consignor or destroyed. Peach pits, peach trees and scions and other trees on peach roots grown in or coming from districts where peach yellows, little peach or peach rosette or either are known to exist are prohibited entry. Every carload and case containing nursery stock, trees, plants, etc., must have plainly marked thereon in a conspicuous manner and place the name and address of consignor; name and address of consignee; name of country, State or Territory where contents were grown and must show that it contains nursery stock, seedlings or seeds. Address State Board of Horticulture, Portland, Oregon.

**PENNSYLVANIA.**—Nurseries must be inspected at least once a year, and no nurseryman, agent, dealer or broker can legally sell or ship stock without a certificate of inspection. Certificates of fumigation are required to accompany shipments from other States, and the word "fumigated" printed or stencilled on or accompanying the certificate of inspection will not be accepted unless it is apparent that such word is a part of the certificate granted by a State inspection officer.

Nurserymen from other States are required to file affidavits that all nursery stock of kinds subject to infestation by San José scale will be properly fumigated before shipment into the State. Blanks furnished upon application. Dealers in nursery stock are granted certificates upon application and the filing of a statement that they will buy nursery stock only from nurserymen or growers holding valid certificates of inspection.

Transportation companies are required to reject all stock entering the State unless certificates of inspection and fumigation are attached. Prof. H. A. Surface, Economic Zoologist; Enos B. Engle, Chief Nursery Inspector, Harrisburg, Pa.

**RHODE ISLAND.**—The Inspection Law has been revised during the past year and now provides that the State Board of Agriculture shall appoint a State Entomologist whose duties it shall be to inspect nurseries and orchards and to grant an annual certificate for sale of nursery stock.

All nursery stock shipped into the State must bear on each package a certificate that the contents have been inspected by an authorized inspection officer. The State Entomologist is, furthermore, authorized to inspect any nursery stock which comes into the State, even when sent in under an official certificate, if he deems it advisable, and shall order its return to the consignor if any injurious insects or plant diseases are found therein.

An affidavit of fumigation is no longer accepted in lieu of official inspection.

Agents who have no nursery, and who wish to sell nursery stock within the State, must apply to the State Entomologist for an agent's license and must state where they propose to purchase their stock to be sold. A. E. Stene, State Entomologist, Kingston, R. I.

**SOUTH CAROLINA.**—Stock coming from other States, provinces or foreign countries and consigned to points within this State must have attached to every bundle or package an interstate tag or permit issued by the South Carolina Crop Pest Commission. This interstate tag or permit can be issued only after the certificate of inspection of the State, country or province where shipment originated has been approved by the South Carolina State Crop Pest Commission and filed in the office of the entomologist or pathologist of the said commission. It is further required that the fumigation certificate of the South Carolina State Crop Pest Commission is properly filled out and filed in the office of the entomologist or pathologist of the commission before the interstate tag or permit can be issued, unless the official inspection certificate includes a statement that the nursery is properly equipped for fumigating. Prof. A. F. Conradi, State Entomologist, Prof. H. W. Barre, State Pathologist, Clemson College, S. C.

**SOUTH DAKOTA.**—All nursery stock shipped into the State must be accompanied by a certificate of inspection issued by the State Entomologist of the State from which it was shipped. Any person, firm or corporation owning a nursery which sells stock to be delivered in this State must certify where the stock was grown and attach this statement to all shipments. Prof. H. C. Severin, State College of Agriculture, Brookings, S. D.

**TENNESSEE.**—Nurseries are inspected annually or oftener if necessary. Any person, firm or corporation without the State, desiring to do business within the State, shall file with the State entomologist and plant pathologist a copy of his certificate of inspection issued and signed by proper official of his State, as well as an agreement to fumigate properly all stock shipped into the State. Every shipment must be accompanied by a copy of said certificate of inspection and a fumigation tag. Every individual sale or bill of trees shall bear a copy of certificate. Failure to comply with the requirements subject stock to confiscation. Prof. G. M. Bentley, State Entomologist and Plant Pathologist, Knoxville, Tenn.

**TEXAS.**—Nurseries and greenhouses are inspected annually. All shipments of nursery stock originating outside the State must bear shipping tags showing copy of certificate of inspection from the State inspector of the State in which the shipment originates, but in addition thereto they must have a tag attached showing copy of permit from Texas. No nursery stock shall be shipped into the State without first filing with the commissioner of agriculture a certified copy of a certificate of inspection from the State inspector of the State in which the shipment originates. A fee of \$5 is required for issuance of permit to ship into the State. Agents or dealers operating in Texas for nurserymen outside of the State must procure proper agents' credentials from their nurseries, on an approved form. Sam. H. Dixon, Chief Inspector, Houston, Tex.

**UTAH.**—No person shall engage in the business of selling or importing nursery stock without having first obtained a license to do business in the State. Any person may obtain a license from the State Horticultural Commission upon the payment of a fee of \$2.50 annually and by filing with the State Horticultural Commission a bond in the sum of \$500. Each salesman or agent must hold a certificate giving his name and the name and address of the persons he represents, together with the license number of his principal. A copy of the certificate of inspection must be attached to each shipment. All nursery stock will be quarantined on arrival and, if deemed necessary, disinfected or destroyed at the cost of the owner. J. Edward Taylor, State Horticultural Inspector, Salt Lake City, Utah.



VERMONT.—Nurseries are inspected annually. Nursery stock shipped into the State shall be accompanied by a certificate of inspection and the name and post-office address of the consignor and consignee. M. B. Cummings, State Nursery Inspector, Burlington, Vt.

VIRGINIA.—Before selling nursery stock, it is necessary to procure from the auditor of public accounts, Richmond, Virginia, a certificate of registration for which the fee is \$20 for principals, duplicates for agents use free. Send certified check or draft for \$20 drawn or indorsed payable to the Treasurer of Virginia. (Personal checks will not be accepted.) Duplicate of certificate of nursery inspection must be filed with the State Entomologist, who will furnish tags at cost, and one tag must be attached to each package of stock to be sold in the State. W. J. Price, Acting State Entomologist, Blacksburg, Va.

WASHINGTON.—No person, firm or corporation shall engage or continue in the business of selling as agent, solicitor or otherwise within the State or importing nursery stock without first having obtained a license. Nursery license fee is \$5 per year; nursery agent's license fee is \$1 per year; nursery bond is \$1,000 to be renewed annually. Every person, firm or corporation licensed to do business in this State must notify the Commissioner of Agriculture of his intention to ship nursery stock giving the names and addresses of the persons, firms or corporations to whom the shipments are made. A copy of the notice shall also be sent the Inspector of the district in which the point of destination is located. For full information address F. A. Huntley, Commissioner Horticulture, Olympia, Wash.

WEST VIRGINIA.—The State Crop Pest Commission has power to provide quarantine regulations concerning the transportation and sale of nursery stock. No person or corporation either for himself or as agent for another shall offer for sale, sell or deliver nursery stock unless he shall have first procured from the State Auditor a certificate of registration, the annual fee for which is \$5. All nursery stock entering the State must be accompanied by a certificate of inspection and also by an official permit tag obtained from the State Entomologist. Duplicate certificates of inspection should be filed. W. E. Rumsey, State Entomologist, Morgantown, W. Va.

WISCONSIN.—All persons, firms or corporations shipping nursery stock into the State are required to file a duplicate certificate of inspection, and secure a State license at the cost of \$5, if selling at retail or through agents. Each shipment must bear certificate tags which shall be attached to each package, box or carload lot. Transportation companies are forbidden to deliver nursery stock unless accompanied by valid certificate tags. All agents selling nursery stock within the State must be supplied with an agent's duplicate license at the cost of \$1 which shall bear the same number and date as that of the principal. Wilful misrepresentation of quality or variety of stock offered for sale shall constitute a punishable misdemeanor. Professor J. G. Sanders, Entomologist and Chief Nursery Inspector, College of Agriculture, Madison, Wis.

WYOMING.—Any person or firm wishing to do business in this State must first obtain a license. Licenses are issued on application for a period terminating on July 1 of the next succeeding inspection year (approximately two years). All applications must be accompanied by the license fee of \$25, a bond in the sum of \$500, conditioned that the principal will faithfully obey the law of the State, and by a certified certificate of inspection from an authorized inspector in the State from which shipments are to be made. On receipt of these the secretary of the State Board issues authorized shipping tags at cost. Nursery stock may not enter the State and transportation companies may not deliver unless such tag be attached to each and every box, bundle or bale. Before making shipments secure copy of the law from the secretary of the State Board of Horticulture, Professor Aven Nelson, Laramie, Wyoming.

CANADA.—No nursery stock shall be imported that is infested with any of the following insect pests or diseases: San José scale, brown-tail moth, gypsy moth, woolly aphis, West India peach scale, potato canker, gooseberry mildew, internal and external parasitic diseases of potato, branch canker and blister rust of white pine. Nursery stock shall be imported only through the ports and during the periods mentioned: Vancouver, B. C., from October 1 to May 1; Niagara Falls, Ont., from October 1 to May 15; Winnipeg, Man., and St. John, N.B., from March

15 to May 15, and from October 7 to December 7; Windsor, Ont., and St. Johns, Que., from March 15 to May 15, and from September 26 to December 7.

Importations by mail shall be subjected to the same regulations. The port by which it is intended that the nursery stock shall enter shall be clearly stated on each package and notice of shipment must be sent to the Dominion Entomologist, Ottawa. European nursery stock and certain other classes of vegetation may in the case of certain ports be allowed to proceed and shall be inspected at point of destination, but must not be unpacked except in the presence of the inspector. Copies of the regulations governing the importation of nursery stock into Canada may be obtained from Dr. C. Gordon Hewitt, Dominion Entomologist, Ottawa, Canada, to whom all inquiries should be addressed.

(Regulations for shipment of nursery stock into Canada are to be revised about October 1, 1913.)

### COMMENTS ON THE NEW TARIFF

The new Tariff Bill has passed the House and Senate and is likely to become law by the affixing of the President's signature in the near future. The Tariff as it now reads is quite acceptable to nurserymen and allied interests, duties on a specific basis have been maintained and the few duty reductions are moderate.

Undoubtedly the best feature of the new Tariff is the elimination of the absurdities, errors in classification and indefiniteness that has existed in Tariffs for the past 25 years and which were a joy to lawyers—but a source of constant irritation and expense to importers; in fact it appears as if the Tariff were made not only by the lawyers—but for the lawyers.

As an example of this we need only say that up to a month ago the duty on all classes of Bulbs were definite and satisfactory—mostly on a specific basis; at the last moment a few additional lines were added to the schedule wording; "provided that all mature mother flowering bulbs imported exclusively for propagating purposes shall be admitted free of duty." A blind man can see that this addition upsets the entire Bulb schedule and makes each item subject to litigation, because the United States Appraisers cannot tell the difference in what is intended for propagating or forcing purposes.

The balance of the Tariff is clear and specific. Evergreen Seedlings are now clearly defined as "Coniferous Evergreen Seedlings, 3 years old or less" and are free of duty. Rosa Rugosa grown from seed, 3 years old or less are now dutiable at \$1.00 per 1000 unquestionably. Now no one will be obliged to pay \$40.00 per 100 as "Roses" on seedlings bought at \$4.00 per 1000—as under former Tariffs.

Pear, Apple and Quince stocks, also St. Julian Plum are reduced from \$2.00 to \$1.00 per 1000. Myrobalan, Mazzard and Mahaleb Seedlings, also Manetti and Multiflora Rose Stocks remain dutiable at \$1.00 per 1000; Rosés remain dutiable at 4c each; general nursery stock has been reduced from 25 per cent to 15 per cent ad valorem. Herbaceous Paeonies and Iris remain dutiable at \$10.00 per 1000.

The advantage to nursery interests in the new Tariff is not so much the slight changes in duty, as that the rate of duty is now definite—the same at all United States ports of entry.

Yours truly,  
JAMES McHUTCHISON.

### THE NEW TARIFF AT A GLANCE

McHutchison & Co., 17 Murray Street, New York, is distributing among the trade neat little hangers that give the New Tariff at a glance.

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AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

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Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

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ROCHESTER, N. Y., NOVEMBER, 1913.

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CO-OPERATION WITH ENTOMOLOGISTS—L. A. Berckmans, Augusta, Ga.

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ARRANGEMENTS—

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## STATE AND DISTRICT ASSOCIATIONS.

American Nurserymen's Protective Association—President, Henry B. Chase, Chase, Ala.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.

American Retail Nurserymen's Protective Association—President, H. W. Marshall, Arlington, Nebraska; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.

Association of Oklahoma Nurserymen—President, J. A. Lopeman, Enid, Oklahoma; secretary, C. E. Garee, Noble, Oklahoma.

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Eastern Association of Nurserymen—President, Wm. C. Barry, Rochester, N. Y.; secretary-treasurer, William Pitkin, Rochester, N. Y. Meets annually in January.

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Western Association of Nurserymen—President, Frank A. Weber, Nursery, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

## DISTINCTIVE STATIONERY

A business built on quality of goods, honest dealing and good service has an asset that is invaluable and it should not be wasted.

Everything that emanates from the house should in some way be tied to the reputation. Every catalogue, circular or letter should carry its identity very plainly and the source be recognized at a glance. To do this and yet keep the literature fresh and up-to-date is not easy and requires much thought.

Established houses fully realize the value of a trade mark even if it be an unregistered one and merely the color of their stationery and the style of their catalogue. They realize that their catalogue or quotation is only one of many and no effort should be spared to carry the conviction to the prospective purchaser that you are able and willing to supply high grade stock in the best possible manner.

Let your stationery reflect your business, good quality, business-like and distinctive.

## COMMON NAMES

If Latin names could be dispensed with so that the nurseryman could express himself to the layman in language that would be better understood what a boon it

would be. What nurseryman has not been asked the name of a plant and hesitated to give it because his hearers would be none the wiser and open himself to suspicion of affectation or at least ostentation of his knowledge.

If all plants had common names and all common names were reliable it would be different and there would be no occasion for giving the scientific one.

But after all botany and horticulture are no different to other arts and trades. Their technique is just as difficult to the uninitiated and who, after he has once mastered the Latin nomenclature, would have it changed. It not only enables those of a different nation and tongue to use a name common to each but the Latin names are really the better and are usually more descriptive.

Take for instance *Acer platanoides*. *Acer*, the generic or family name, means hard or sharp, referring to the wood. The specific name *platanoides* means plane-like or like a plane tree. Is not plane-like *Acer* more descriptive than Norway Maple?

It is not, however, those plants with a well identified common name like the Norway Maple that cause the nurseryman worry, but those plants that have no generally accepted common name, such as *Aralia pentaphylla*, *Buddleia variabilis*, *Callicarpa purpurea* and a host of others.

Then there are instances where the same common name is applied to very distinct plants. Poplar might be *Populus* or *Liriodendron*. Syringa is the common name for the *Philadelphus* but the proper name for the Lilac. *Hydrangea* is a proper name so well known that is in common use but the *Hydrangea* family is so popular that the different members cannot be identified properly unless the full Latin name is given except by a long, wordy description.

Every nurseryman should make it his business to study botanical terms even if he does not care to study Latin. It is a small thing but a wonderful help to know that alba

means white; nigra, black; cærulea, blue; lutea, yellow; purpurea, purple; rubra, red; viridis, green; vulgaris, common; gracilis, graceful; flora, flower and carpum, fruit or the Latin terms of colors, numbers, form, etc., that go to make up the scientific names of plants.

It is quite proper for the nurseryman to use common names in the catalogue to enable the public to understand it but he should keep in mind the only sure way when dealing with another nurseryman to avoid mistakes is to give the full proper name. It may seem a waste of time and ink to write *Hydrangea paniculata grandiflora* but is a greater waste to have *Hydrangea paniculata* or *Hydrangea arborescens grandiflora* sent him when he really meant to order the first mentioned. Then, too, he should not put himself on the same plane as the customer who comes to the nursery and asks for a Japonica without specifying whether it is *Acer*, *Aucuba*, *Pyrus*, *Spiraea* or any of those many plants indicating their native habitat by their specific name.

#### AN INTERESTING LETTER FROM WILL B. MUNSON

DENISON, Texas, September 30, 1913.

Editor, NATIONAL NURSERYMAN,  
Flourtown, Pa.

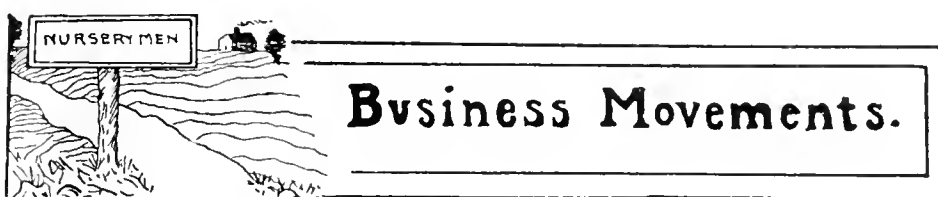
Dear Sir: I am just in receipt of the Report of the Proceedings of the Portland Convention of the American Association of Nurserymen, and have spent a very pleasant morning in reading same, as it called to my mind many pleasant and profitable incidents in which I was fortunate to participate. I would not have missed attending that convention for many times the cost of the trip.

I find in the third paragraph on page 94 of the report a typographical error in which I am quoted as saying "There are parts of Texas 6,000 and 8,000 miles from the citrus district, etc." We all know Texas is a large domain, but does not yet quite extend a third of the way around the globe. This is plainly a typographical error that escaped proofing. I would not call attention to it except for one reason, and that reason is this:

At the recent convention of the Texas Nurserymen's Association held at Waco on the 23d and 4th inst., I had the pleasure to report and relate the happenings at the Portland meeting. In giving a glowing account of the experiences we had at Portland, I mentioned the fine salmon dinner we had on the boat trip up the Columbia River, and how so few large salmon were made to serve such a large body of people as we had on that occasion. As salmon is a fish I was stopped in my speech and cautioned not to tell a "fish story." Now if these Texas nurserymen who heard me at Waco and who did not go to Portland should read in the report what I am there quoted as saying, they would not believe or discredit my Portland "fish story" and when they find out I was trying to make those at Portland believe that the limits of Texas extended into Siberia by the way of Alaska. To make my statements at Waco about Portland meeting "good" please correct in your journal the error as appearing in the published proceedings. What I said was "600 to 800 miles"; also where I am quoted as saying "white blight" should read "white fly."

While at the Waco convention I took the opportunity of presenting to the fifty members present the advantages of membership in the American Association. Being the vice-president for Texas it is my duty to look after the membership in this State, and I have begun the work, and I trust by the time of the Cleveland meeting arrives that the membership from Texas will be materially increased to its proper proportion.

We had a very interesting and profitable meeting at Waco, and presume a synopsis of same will be sent you by the Secretary, J. M. Ramsey of Austin. The following were elected officers for the coming year: President J. S. Kerr, Sherman; vice-president, Will B. Munson, Denison; secretary-treasurer, J. M. Ramsey, Austin. A special premium fund of about \$200 was raised to be offered as premiums for exhibits of Texas pecans at the forth-coming convention of National Nut Growers to be held at Houston, Texas, the first week of November.



The firm of E. C. Haines & Co., Inc., which has branches at Mount Kisco and White Plains, N. Y., and Stamford, Conn., has filed a petition in bankruptcy here, with liabilities \$19,011 and nominal assets \$24,225, consisting of real estate, \$14,000; stock, \$4,000; plant, \$3,400; horses and wagons, \$500; accounts, \$2,250, and cash in bank, \$25. The real estate consists of two and one-half acres of land, with six greenhouses, cottage, barn, etc. Emil V. Kratsch is president. The business has been established forty years. Judge Hough appointed Chas. L. Brookheim receiver, on a bond of \$750. The company expects to make a settlement with its creditors.

#### THE PHOENIX ASSETS

John Y. Chisholm, who was appointed by Judge Myers as receiver for the Phoenix Nursery Co., Bloomington, Ill., stated to a reporter September 18 that the creditors have not thus far shown a disposition to crowd matters and if this condition continues to exist a much better settlement will be made. "If they crowd us," said Mr. Chisholm, "we won't be able to pay more than 30 cents on the dollar, but if they give us time I anticipate a satisfactory settlement will be possible." Mr. Chisholm stated further that the nursery has much young stock that is practically valueless unless the creditors are lenient and give the company time to market it a little later on.

Lewis Roesch & Son, Fredonia, N. Y., growers of grape vines, currants, gooseberries and other small fruits, have dissolved partnership by mutual consent. All accounts against said firm should be presented, and all debts owing said firm should be paid to Lewis Roesch, 57 Berry St., Fredonia, New York.



### A NATIONAL FRUIT GROWERS' EVENT

Fruit Week in Washington, D. C., November 17 to 21, will present the following program: The 17th installation of exhibits; competition of new fruits or nuts for Wilder medals, the highest pomological honor conferred in America; committee deliberations covering the revision of fruit names;

migrants; Alaska's Pomological Resources; Fruit-growing for the Urbanite and Suburbanite; Canadian Pomology; Bits of Spanish Horticulture; The Concentration of fruit juices; Grading and Packing; Our Grape Growing Industry; Pomological Problems of the Southwest; Pacific Coast Fruit Growing illustrated:

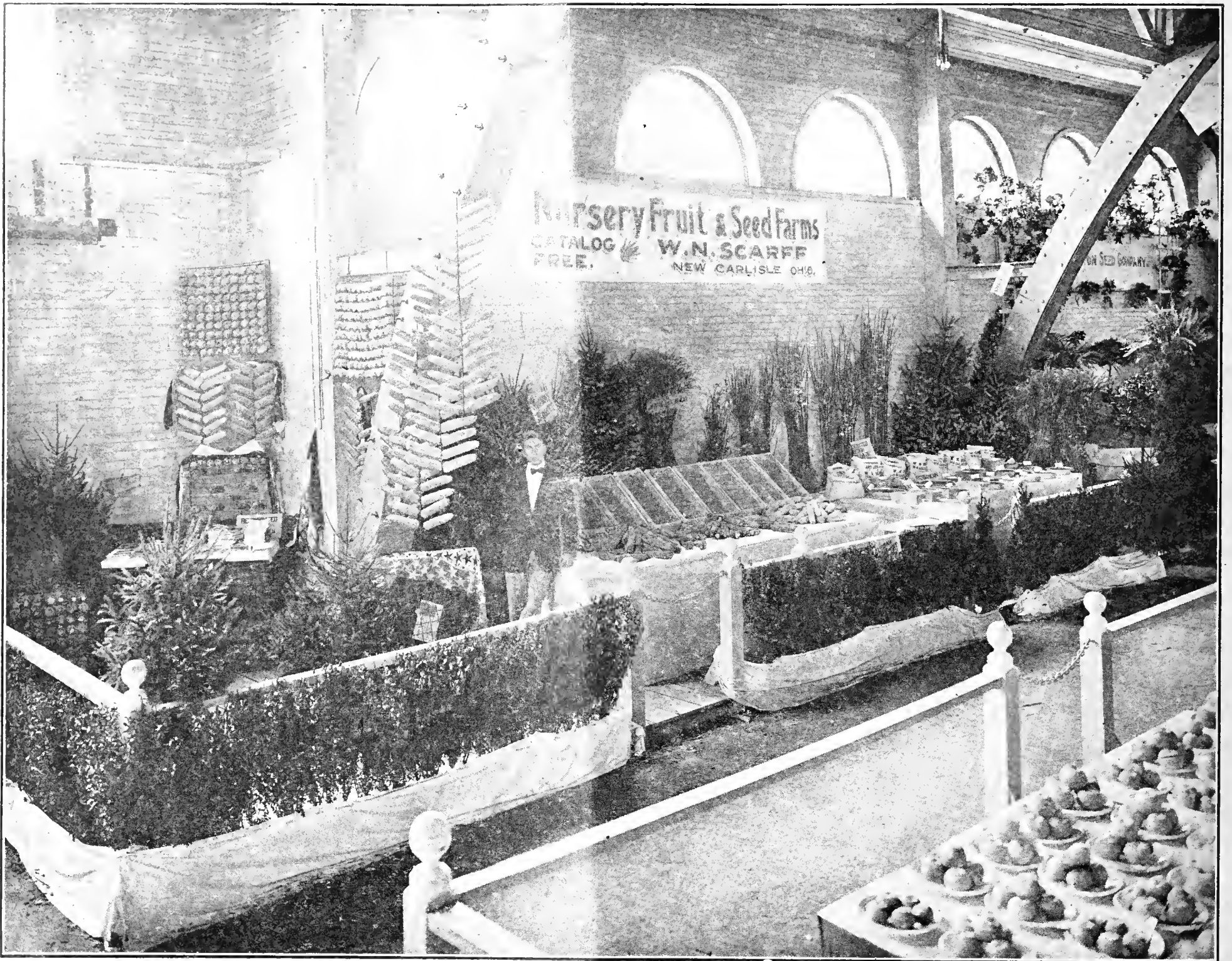


EXHIBIT OF W. N. SCARFF, NEW CARLISLE, OHIO, AT OHIO STATE FAIR

the regarding of varietal values as to quality; the recommendation of varieties for planting in commercial orchards, home orchards, and new or little known varieties worthy of extended trial; score cards for the judging of fruit exhibits.

The 18th and 19th American Pomological Society will consider problems of practical orcharding; fruit and orchard pests and remedies; the status of horticulture in the various states, provinces and islands within the field of the society; contest in score card judging, open to college teams and individuals; among the papers presented will be the following topics: Pomology in our School System; Horticulture in France; Roadside Pomology; Tropical Fruits; Irrigation in Fruit Growing; The Small Fruit Industry; Maintenance of Profitable Bearing Trees; Our Pomological Im-

The 19th and 20th the Northern Nut Growers' Association will consider the various problems relating to the nut industry of this country. A large exhibit of nuts from far and near will aid in the work of this organization; while papers and discussions will cover all phases of the continental nut industry.

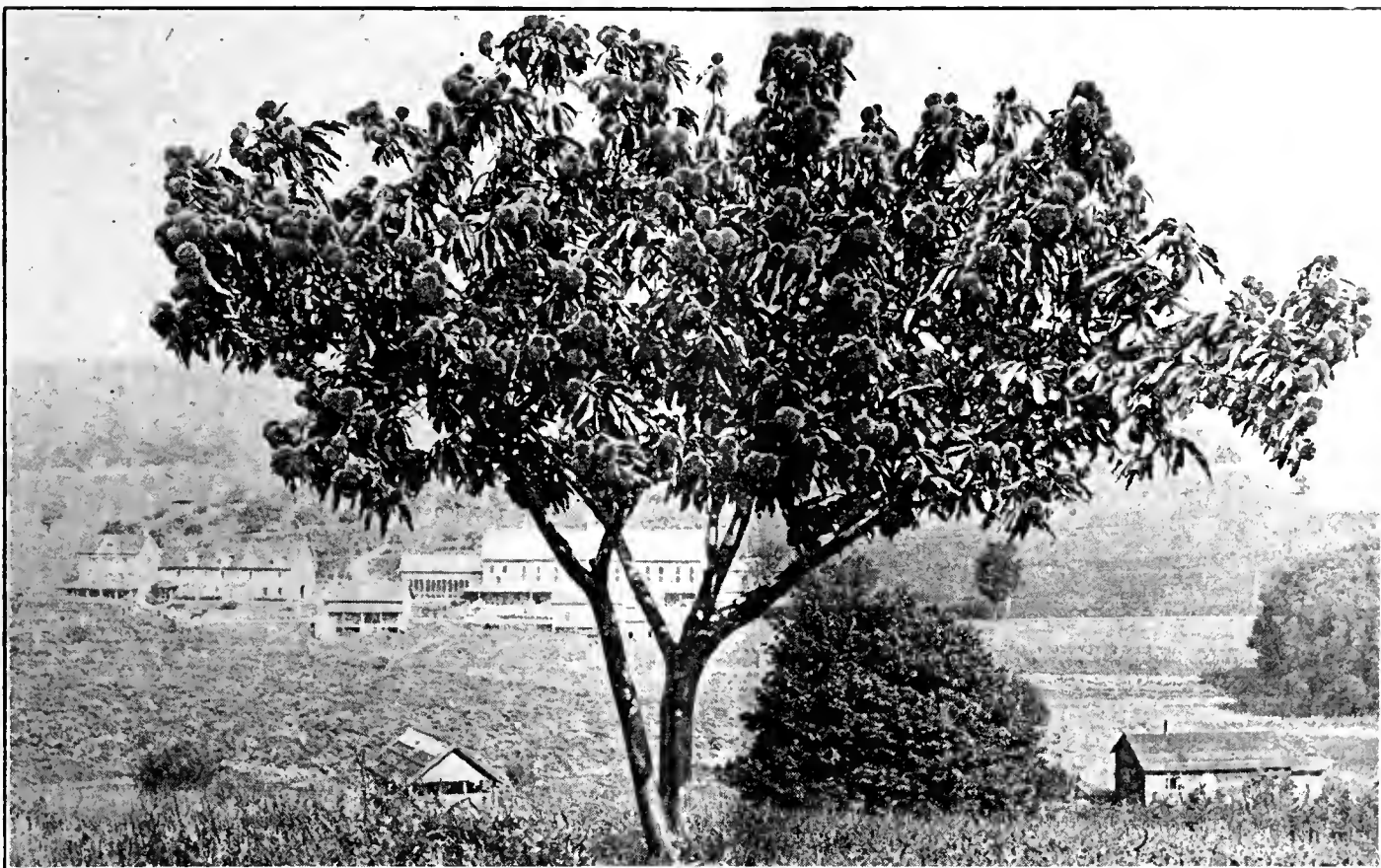
The 20th and 21st will be devoted to an extended discussion of markets and marketing as related to fruit growing in which growers, dealers and consumers from the Atlantic to the Pacific, and Canada to the Gulf will participate. The meetings of the 20th will be a joint affair between the American Pomological Society and the Eastern Fruit Growers Association. The discussions of the 21st will be under the auspices of the Eastern Fruit Growers Association. During

these two days also the Society for Horticultural Science will consider the problems of plant-breeding, college methods of teaching pomology and horticulture, and various other strictly scientific phases of the general subject of horticulture.

Plans are in the making for an excursion to Baltimore to inspect the fruit exhibit of the Maryland State Society the morning of the 22d. For further information write the Secretary of the American Pomological Society, E. R. Lake, Washington, D. C., 2033 Park Road.

### UP-TO-DATE NUT GROVES

The Sober-Paragon Chestnut Groves of C. K. Sober, Lewisburg, Pa., cover upwards of 400 acres and contain at least 50,000 trees in bearing, ranging from six to fourteen years old.



AN ELEVEN YEAR OLD SOBER-PARAGON CHESTNUT TREE.  
This tree bore one bushel of nuts in 1912. Buildings of C. K. Sober, Lewisburg, Pa., in the background.

The groves are all laid out in sections 100 feet wide with every section numbered. This greatly facilitates the ease and harvesting of the nuts which is now Oct. 18th in full swing. The nuts are threshed out of the burrs in much the same way that grain is. Mr. Sober has invented his own machine for the purpose. Its record so far is one bushel of nuts in 54 seconds but Mr. Sober thinks with everything favorable and good burrs to work on the machine is capable of turning out one bushel of clean nuts every 30 seconds.

About 100 bushels a day are being harvested.

In addition to the bearing groves there are 300,000 grafted Sober-Paragon trees ready for the market and about 1,000,000 seedlings ranging from one to five years old.

Only bearing trees are sent out and these are capable of bearing the second year after planting.

The stocks are all grown from Sober-Paragon seed. The nuts are buried in sand to keep them over the winter and as soon as they begin to sprout in the spring they are planted out in much the same manner as you would plant potatoes.

These seedlings are then grafted when two and three years old with scions from special trees of the true Sober-Paragon.

The Sober-Paragon does not come true from seed so that grafted trees are the only ones that can be depended upon.

### PLANTING BARBERRY HEDGES IN THE FALL

Fred Haxton, Nurseryman, 4717 Winthrop Ave., Chicago, writes:

Of possible interest to you, as showing the comparative merits of fall and spring planting, is the result of an investigation I have just completed among those who planted hedges of my Japanese barberry last fall. Every buyer except one reported that the hedges were in excellent condition, and that one, a resident of Huntington, W. Va., said the plants made a good growth early in the season, but that 96 out of 400 now

appear to be dead as a result of drouth which was far more severe on shrubs planted last spring.

The plant of the Spaulding Nursery & Orchards Co., Springfield, Ill., that was recently destroyed by fire is to be rebuilt at a cost of \$1,500.

Citizens of Eaton, O., have offered \$5,000 to Chas. Ernst to establish his nurseries there. He has decided to accept as he suffered so much loss from the floods last spring at his present location at Moseow, O.

### INQUIRY FOR SIDE TREE PLOW

To the Editor of the NURSERYMAN:

Won't you please tell me who sells the one side tree plow? I am in the market for one and would appreciate your helping me to find one.

A. M.

Will some reader please give this information? Editor.



MINUTES OF THE THIRD ANNUAL MEETING OF  
THE MISSISSIPPI NURSERYMEN'S ASSOCIATION  
HELD AT AGRICULTURAL COLLEGE, MISSIS-  
SIPPI ON AUGUST 27 AND 28, 1913

The meeting was called to order on August 27th, 1913, at 9:30 A. M. by President J. R. Woodham. The minutes of the Gulfport meeting were read and upon motion by Mr. Bechtel were unanimously adopted. President Woodham made a brief address relating chiefly to his experience in endeavoring to obtain an appropriation for nursery and orchard inspection and to the needs of this association.

The Secretary-Treasurer gave an itemized report of the financial condition of the association.

The committee appointed last year in Gulfport to draft a constitution made their report. It was decided to consider each article in the constitution separately. After considerable discussion the association adopted the constitution proposed by the committee, with but few changes.

The following officers were elected to serve for 1914: President, Theo. Bechtel, Ocean Springs; vice-president, S. W. Crowell, Roseacres; Secretary-treasurer, R. W. Harned, Agricultural College; member of the executive committee, J. E. Lewis, Europa; ex-officio member of the executive committee, J. R. Woodham, Newton.

During the open meetings of the Association the following program of interesting and instructive papers were read. "Propagation of Nursery Stock" by James Brodie, Biloxi; "Pecans" by Theo. Bechtel, Ocean Springs; "Roscs" by S. W. Crowell, Roseacres.

At the meeting held Thursday morning the association had a long discussion of the laws of other states in regard to nursery and orchard inspection and in regards to our needs in Mississippi. Some members thought we should ask our legislature to appropriate at least \$40,000 for this work, and although all agreed that such a sum could be spent so as to benefit the farmers of the state many times this amount, the majority of our members thought that it would be impossible to get a large appropriation at this time. It was urged that every nurseryman, horticulturist, and farmer of the state should take this matter up with the representatives and senators from the various counties at once, and on motion of Mr. Ball, Mr. S. W. Crowell was unanimously requested to be a committee of one to make a personal appeal to Governor Brewer in regard to this appropriation. After much discussion a resolution asking our legislature to appropriate \$5000 for the next biennial period was unanimously adopted.

Mr. Bechtel moved "that the entomologist be requested to promulgate a regulation requiring outside nurseries to pay a fee of \$5 to sell or ship nursery stock into the state of Mississippi," seconded by Mr. Ball and passed unanimously.

Mr. Crowell offered the following resolution that was unanimously adopted. "Whereas it has been brought to the attention of the Mississippi Nurserymen's Association that certain nurseries are publishing the statement that they are recommended by the Mississippi A. & M. College. *Therefore be it resolved* that we as an organization disapprove of such a method of discrimination."

A letter was read from Mr. C. Forkert of Ocean Springs regretting his inability to attend the meeting. Mr. Bechtel was requested to carry a complimentary reply to this letter.

R. W. HARNED Secretary-treasurer.

AMERICAN ASSOCIATION OF NURSERYMEN  
NEVER SLEEPS

Through its efficient committees the Association is always on the watch looking after the interests of the nurseryman. The following correspondence is self-explanatory.

OFFICIAL CLASSIFICATION COMMITTEE

143 Liberty St.

NEW YORK CITY, Sept. 22, 1913.

Dormant Plants vs. Plants that are not Dormant.

American Association of Nurserymen,

Mr. Chas. Sizemore,

Chairman Transportation Committee,  
Louisiana, Missouri.

My Dear Mr. Sizemore:

Your letter of the 15th instant, with enclosures, presents a question that has been up in several quarters, i.e.—the line to be drawn between dormant plants vs. plants that are not dormant, and it seems to me that we should not confine the consideration to the particular box plants that are shipped from Chestnut Hill, Philadelphia, to Windsor Beach, N. Y., but rather to get at the root of the matter so that the nurserymen and the carriers may have a proper understanding of the interpretation to be applied.

If you can suggest any means by which a comprehensive consideration of this question can be initiated such as having a specific declaration proceeding from the American Association of Nurserymen as to the proper understanding of the terms "dormant" vs. "not dormant," I shall be glad to follow the matter up, as I realize that something should be done to clear up the situation.

Yours truly,

R. M. COLLYER, Chairman.

September 25, 1913.

Mr. R. N. Collyer, Chairman,

Official Classification Committee,

143 Liberty St., New York City, N. Y.

Dear Mr. Collyer:

This acknowledges your letter September 22d, in regard to dormant and not dormant plants. Following your letter we will have this question placed before the American Association of Nurserymen at their next meeting in June, 1914 and trust will be able to secure a declaration from them that will be satisfactory to the nurserymen and carriers. Will keep correspondence before me and advise you at the time.

In the meantime will you be able to have the shipment from Chestnut Hill, Pa. to Windsor Beach, N. Y., assessed on the correct basis?

Truly,

CHAS. SIZEMORE,  
Chairman Transportation Committee.



There is little doubt but that there should be a clean cut definition of what is meant by dormant stock. One that could be understood by the carriers as well as the nurseryman.

The meaning of the word dormant, as used in the Railroad Classification, was to define the difference between that class of stock such as is usually shipped by florists from the greenhouse which requires more care and costly handling on behalf of the transportation companies, from the dormant stock, such as trees, shrubs, evergreens and herbaceous plants dug from the open ground.

There is room for a never ending quibble if the definition of the word dormant is to be left to railroad inspectors with consequent unfair rulings and overcharges. [EDITOR].

### SHENANDOAH NURSERIES TO BE INCORPORATED

Articles of incorporation have been filed with the secretary of state by D. S. Lake, through his attorney, Denver L. Wilson, asking for permission to incorporate the Shenandoah Nurseries for a capital stock of \$200,000. As soon as the request is accepted permission will be asked of the executive council of the state for D. S. Lake to turn over his nursery property in return for stock in the new corporation. Only the property directly concerned with the nursery business will be included in the new concern, and one striking feature is that while the capital stock is to be only \$200,000 the actual value of the assets to be turned over to the corporation is approximately \$300,000.

None of Mr. Lake's town realty or personal investments are included; had they been his total assets would have been found to reach nearly \$500,000.

The board of directors in the new corporation will consist of: D. S. Lake, president; A. F. Lake, vice-president; R. S. Lake, secretary-treasurer.

The measure is taken with the object in view of insuring the perpetuating of the business along the same lines that D. S. Lake has always conducted it, and eliminating the possibility of tying the estate up by administrator's proceedings, in the event of Mr. Lake's death or his being compelled to relinquish the reins for any reason.

### TRADE REPORTS

This has been another *very* discouraging year to the nurserymen of Oklahoma. Little rain having fallen in the winter of 1912 and 1913, we started in in the spring of 1913 with but little moisture in the subsoil. The top soil contained enough moisture to give us good stands of nearly all kinds of stock planted. We got a good stand of grafts and buds started out very well. Local showers came and were sufficient to keep stock growing till about July first and then the extreme heat and droughth was so intense and continuous that every tree and plant simply quit and while we got a good growth on cherry and pear, the other sorts of stock did not make up well and the result is: much light stock in apple, plum, peach, apricot, etc., etc.

Sales were never better up to about July first, since then but little doing. The outlook for collections this fall is very poor.

Sales in apples are light, but on peach, cherry, pear and small fruits sales seem to be better than for several years. In fact, the demand for these seem to be on the increase. Owing to the extreme drouth, we were not able to get budding done in July and August and now since rains have put the seedlings in good condition for budding the time is so short we will not be able to complete the work, and the result is, many thousands will go into the winter unbudded.

The outlook for the Oklahoma nurseryman, is not one of the brightest.

Yours truly,

J. A. LOPEMAN.

We have had one of the driest summers known for several years. Large trees in the forest were not able to stand it. A large number of city trees planted in the parkways died.

Had a good rain a couple of weeks ago and a heavy one last week which has freshened things up wonderfully.

All two year fruit stock such as apple, pear and plums have made a fair growth. Apples will grade a little light. Peach seem to have made up heavy as usual. Ornamental trees, shrubs, vines and roses have made a very satisfactory growth. Evergreens did not do so well.

Think we will have a good demand for ornamentals this fall. The demand seems to be increasing all the while for ornamental shrubs, trees and herbaceous plants.

Yours very truly,

GEO. H. JOHNSTON.

Our stock has made up remarkably well, as there has been little scarcity of moisture at any of our plants.

As to business prospects for fall, they are very bright, indeed. Conditions everywhere are much improved over last season and early sales indicate a good business. It is a little early yet to make a definite statement as to what the demand will be for different stock or as to any probable surplus.

Yours very truly,

STARK BRO'S. NURSERIES & ORCHARDS CO.,

By A. B. Howell, Mail Order Manager.

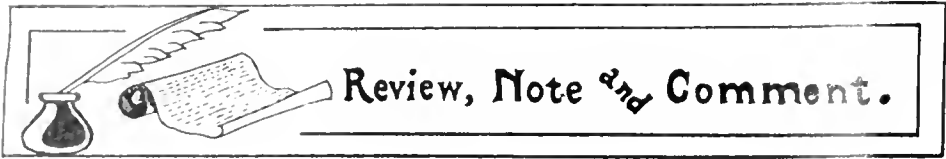
### ANNUAL REPORT OF THE AMERICAN ASSOCIATION OF NURSERYMEN

This book contains 154 pages 8½ by 6 inches. Annual reports are not usually very much read. They are too often laid aside to look at over some future time, which never comes.

Nurserymen would do well to make an exception of this one for it is full of matter of vital interest to nurserymen. In fact is it a record of progress and a program of future aims of not only The American Association of Nurserymen but of the nursery business.

Secretary John Hall is to be congratulated on its make-up. It is attractive and well edited, yet not without its inadvertent joke on the size of Texas.

A new nursery is being established at Muscatine, Ia. C. H. Chandler, Cedar Rapids, Ia., has purchased 234 acres at \$225.00 per acre for that purpose.



An interesting incident in connection with the opening of the Palace of Peace at the Hague was the presentation by Messrs. James Cocker & Sons, Aberdeen, Scotland, of a bouquet of the famous new rose, "Mrs. Andrew Carnegie," named after the wife of Mr. Andrew Carnegie, presented by Messrs. H. Den Ouden & Son, The Old Farm Nurseries, Boskoop, Holland.

The beautiful floral gift was graciously accepted by Mrs. Carnegie and a kindly letter was received by Messrs. H. den Ouden & Son, as follows:

"Mrs. Carnegie thanks Messrs. H. den Ouden & Son very much for the beautiful roses they so kindly sent her from Messrs. Cocker when she was at the Hague."

9th September 1913.

Skibo Castle, Dornoch, Sutherland.

The case of William P. Stark against the Stark Brothers Nurseries & Orchards company for the appointment of a receiver for the company was filed in the Louisiana court of common pleas, Pike county, Mo., on the 7th day of March, 1913.

The case on the application of William P. Stark was continued in that court, and finally on his application a change of venue was taken to the circuit court at Mexico, in Audrain county, Mo.

The case was called for trial in that court on the 22d day of September before Honorable J. D. Barnett, the circuit judge; and, on the 30th of September the case was decided in favor of the defendants and the receivership denied.

A verdict for \$5,520.42 with interest from March 7, 1912, to date was yesterday brought in by a jury in Judge Speer's court in favor of Cornelia Cruger and Catharine Cruger of Barrytown, N. J., in their suit against John T. Withers of this city. The suit was to recover for goods sold and money loaned the defendant, who had appealed from the decision of Judge Charles Carrick as referee.

The referee held that the plaintiffs were entitled to \$5,820.12, but the jury yesterday deducted from this sum \$300 for tools furnished to the plaintiffs. The defendant was

formerly an agent for the plaintiffs, who traded under the name of the Shatemuc Nurseries and their suit arose from a dispute over a final accounting, the defendant alleging a set off.—*The Jersey Journal*.

H. A. Surface, state zoölogist, announced before the Pennsylvania Horticultural Society his discovery of an internal parasite that was cleaning the dreaded San José scale out of eastern Pennsylvania. This parasite, which he describes as "a hymenopteron, a minute wasp-like insect," has been so successful against the scale that, says Mr. Surface, "entire nurseries that could not get state certificates a year ago because of bad infection, are now so clean that the best inspectors have been unable to find a living scale in them this season."

The Continental Plant Company of Kittrell, N. C., one of the large mail-order nurserymen claim to have a Strawberry that bears fruit from early spring until the winter. The manifest bearing qualities suggested the name "Never Stop." It is an abundant bearer, having a record of 10,000 quarts per acre under a high state of cultivation and it has proven hardy and very adaptable to different soils and climates.

The Stark Bros. Nurseries and Orchards Co., of Louisiana, Missouri, have just issued the Stark Orchard & Spray Book, a capital little work that should be in the hands of every farmer and fruit grower in the country. It is a ready reference on diseases and the care of fruit and other trees, with the subject of spraying brought up to the most recent discoveries and practice.

The International Nurseries, of New York, have been incorporated to do a general nursery business, with a capital of \$25,000. The incorporators are W. E. Maynard and C. M. O'Farrell, of New York, and D. J. Wagner, of Jamaica.

The National Nursery, Uruguay, has donated to the municipalities of the Republic 200,000 shade trees, which will be planted in the cities and towns this year.—*Daily Consular Report*.

The Menary Nursery Company, of Omaha, Nebraska, has been incorporated. Capital \$25,000.

“THE MONTHLY SUMMARY OF COMMERCE AND FINANCE” FOR AUGUST, 1913, GIVES THE FOLLOWING REPORT OF IMPORTS OF PLANTS, TREES, SHRUBS AND VINES.

ARTICLES	AUGUST—				EIGHT MONTHS ENDING AUGUST—					
	1912		1913		1911		1912		1913	
	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values
Plants, trees, shrubs and vines:										
Fruit plants, tropical and semi-tropical, for propagating purposes .....				1,085		145		12,891		13,952
Bulbs, bulbous roots, or corms, cultivated for their flowers or foliage .....	127,252	313,654	48,452	407,563		512,868	148,823	463,771	60,633	524,661
All other .....		3,827		3,707		693,488		726,696		798,458
Total .....		317,481		412,355		1,206,501		1,203,358		1,337,071

## WHAT A NURSERYMAN SEES IN HIS TRAVELS

Mainly trees. It is pretty safe to say the nurseryman sees more trees than anything else in his travels. Not that he has not an eye for a pretty girl, if he be unmarried, or that he would not see a restaurant sign if he were hungry, or even a sign in gold letters if he happened to be thirsty, but the fact remains that a tree out of the ordinary would attract his attention first.

Even in New York, while among the sky-scrapers, he would be apt to make mental notes of what kind of trees and shrubs were growing in the churchyard of old Trinity in spite of his close proximity to Wall Street. If he travels south when he strikes Philadelphia his movements can be more leisurely and he can look around and study the vegetation along the streets without so much danger of being jostled or run over. He sees the Carolina Poplars constantly shedding their leaves along the "cheap building operation" streets. Pin Oaks, Norway Maples and Oriental Planes in front of those houses where there has been a little more judgment used and out in the older suburbs fine specimens of almost every tree that will grow in that latitude.

Here a magnificent River's Beech, there huge storm broken Silver Maples, majestic oaks, choice evergreens or a big, rambling *Wistaria* with a trunk like a boa-constrictor that must be a blaze of glory when in flower. Then the Japanese Maples, Pink Dogwoods, Chinese Magnolias, etc., etc. He will think to himself there have been big nurseries in the vicinity of Philadelphia for many years and the city is better for it and has a corresponding better opinion of his own importance.

He mentally decides that the Norway Maple, Pin Oak and Oriental Planes are the street trees for Philadelphia.

Wilmington is not much further south, less than an hour's ride, but there is a subtle change. An occasional Crepe Myrtle and *Magnolia grandiflora* shows the balmy southern influence. The more tender roses do not seem as if they had been cut back quite so heavy the past winter, a little thing in itself but it speaks volumes to him.

Then as he goes on to Baltimore, just a few more Crepe Myrtle, Magnolias and Roses. Otherwise the trees and plants are much the same as in Philadelphia and New York.

At Roland Park the nurseryman feels like taking his hat off to the founders and managers of this residence section. Here his products have been liberally and well used. The topography of the ground, the big trees, the artistically built homes and evident master-minds that realized the value of nursery stock in relation to real estate have built monuments to themselves that should be the shrine of all real estate men.

Look at that magnificent Holly. Why it's the real American and growing wild. Why it must be indigenous. That's so, it is plentiful in the south. No nurseryman from the north could pass a tree like that and not see it.

It is not much of a run from Baltimore into Washington and on arriving at the Union Station he cannot help thinking he is somewhere with such a wonder of architecture. It is a question what a nurseryman would see first on going out of the station. Would it be the White House? But what nurseryman ever aspired to the White House? He may have aspired to a government contract but his kingdom is

not in politics. Maybe he would like to be President just long enough to fix inspection laws. Or would the nurseryman see the Washington Monument or the broad thoroughfares lined with young Pin Oaks? What made them eat the leaders out when they were planted? Guess they will make trees in spite of it.

Beautiful broad avenues planted with well selected trees; no overhead wires; large, costly buildings with small grounds; florists instead of nurserymen and plenty of money for improvements and government supervision have produced a city worthy to be the nation's capitol.

The nurseryman decides Pin Oaks are "it" in Washington, with the less known Ginkgo tree well established in popularity. A visit to the Botanic Gardens shows him the reason why. Here is the best avenue of Ginkgos in the country and he mentally decides they are all right and that he will grow more of them.

It would be nice to dally along the way as he goes south and visit some of the old plantations and see some of the fine old specimens planted before the war. Ole Massa must have been a true country gentleman who knew his trees and plants. Fine old yews, Cedars of Lebanon, patriarchal oaks, box not dreamed of in the north, tell of departed glory and hint at the knowledge of the planter of a century ago. But there is no time to linger, shipping season is too close, so the next stop must be Richmond and a night train will land him there in the morning and save hotel bill.

It is a pity the railroad has to enter a city at the poorest quarters of the town. The scenery is never impressive but the trolley ears usually take you to the pretty suburbs, though an automobile is better. My word, how suburbs have been built up in the last decade! Is it being overdone? Guess not because people ought to live where there are trees, plants and flowers.

The travelling nurseryman's attention is held fast at the first sight of that tree with big, glossy, green leaves. Now he knows positively he is in the south because it is a *Magnolia grandiflora* with tree-like proportions and there are figs that have not been killed back and a Marechal Neil Rose up to the top of the house, a pomegranate and what in horticulture is that tree covered with pink bloom at this time of year! Well! Well! Crepe Myrtle. Why if I had that growing on my nursery at home I would issue invitations for all the countryside to come and see it and here it is growing in a negro's yard, and they think no more of them here than we do of a lilac bush. Murphy's Hotel is quite a building but the Crepe Myrtle holds the nurseryman's attention longest and what is that low-headed tree that suggests the *Catalpa Bungei*? Texas Umbrella Tree, *Melia Azedarach*. He knows it because he saw the picture in Berckmann's catalogue.

Yes, the Willow Oak is the street tree for Richmond, but it is time to take the train for Norfolk.

What a beautiful combination of land and water and climate but Norfolk must be shy on nursery influence. Here are suburbs with houses costing up to fifty thousand dollars with grounds that would not be particularly creditable to a five thousand dollar house. They will wake up some day and find how easy it is to add fifty percent value to their property by planting a little of the nurseryman's stock.



A branch of the Rochester Nursery Company has been started at Litchfield, Ill., about eight acres having been leased for the raising of plants, shrubs, etc. The Sims Brothers, two young men, with experience in the nursery business, have it in charge.

John Y. Chisholm, receiver of the Phoenix Nursery Co., Bloomington, Ill., is using every possible economy to conduct the business while it is in his charge, in order to realize the most cash for the creditors.

He has decided to dispense with the force of travelling salesmen and sell by catalogue only for a year or two.

The total liabilities are possibly \$60,000 but the assets are considerably more so the creditors have decided to let Mr. Chisholm remain in charge and work out the situation the best way possible.

Everything is in excellent condition so there is every hope that all indebtedness will be cleaned up and the business put on a good basis.

## Announcement to the Trade

**WE** have prepared a Duty Card giving the rates of Duty upon Greenhouse Plants, Nursery Stock, Bulbs and Seeds, under the New Tariff.

It is just the thing to hang up on your office wall for quick reference.

It will be mailed gratis to all Florists, Nurserymen or Seedsmen, who write for it on their business stationery and state the class of stock they usually import from Europe.

**McHutchison & Co. - New York**  
17 Murray St. THE IMPORT HOUSE

**WANTED** Position as foreman or superintendent in some nursery. Near good school. 30 years' experience in Southern nurseries. Can give satisfactory reference. JAMES W. HOSCH, Toney, Ala. R. No. 1.

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and all other old and new varieties which we think worthy of general cultivation

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A steady industrious man acquainted with all branches of nursery work and be competent to take charge of packing yard and storage buildings. Give references and state wages wanted.

## The Barnes Brothers Nursery Co.

YALESVILLE, CONN.

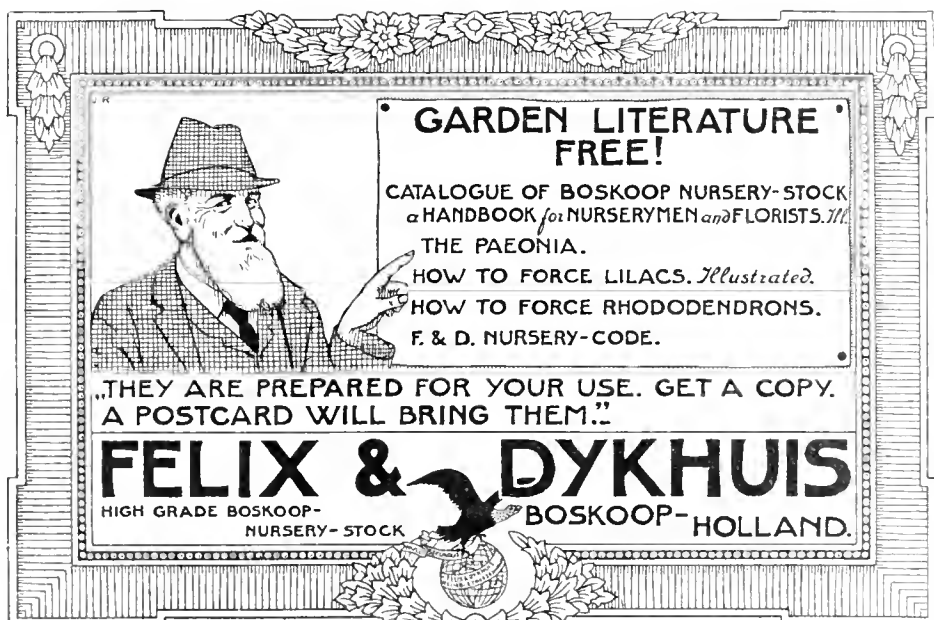
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SPECIAL PRICES FOR FALL DELIVERY IN CAR LOTS

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**ROSES** 2½ in. for lining out;  
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Different Varieties, and Prices to Suit. Write for Sample and Price.

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Green Mountain in either 2-year-old or 3-year. Get our prices.

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First-class plants, all new varieties. Write for list and prices.

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*Fine stock of all sizes up to 3 inches caliper*

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PEACH  
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STOCK IS CHOICE      PRICES ARE RIGHT  
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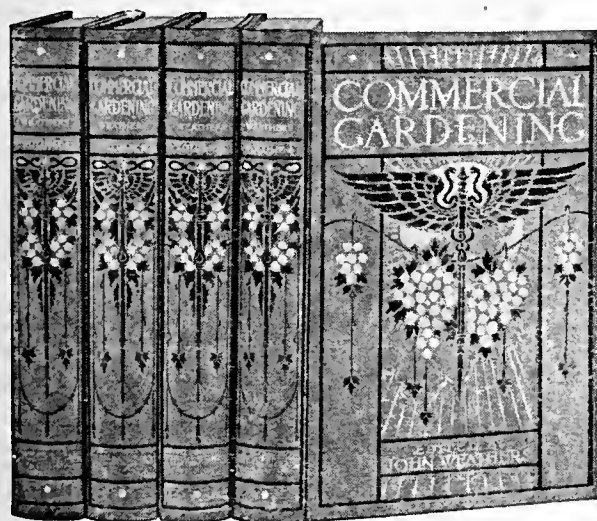
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PEACH AND APPLE in car-lots or less.  
CAROLINA POPLAR, 10 to 12, 8 to 10, and 6 to 8 ft.  
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Peach Trees, 1 year, 35 varieties	Apple, 2 year, all grades
Apple, 1 year mostly buds	Cherries, 2 year, general list sour
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Can furnish the above in carload lots or less, also

Grapes, Currants, Gooseberries, Catalpa Speciosa, Carolina Poplar  
Ornamentals in good assortment

WE WOULD MAKE VERY ATTRACTIVE PRICES ON PEACH TREES IN CARLOAD LOTS.

Please submit list of wants for prices. We have a few N. C. Natural Peach Seeds to offer. Crop 1912, also Crop 1913.

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INTRODUCER OF THE THREE STANDARD FRUITS:

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Our supply of above varieties is always less than the demands upon us before shipping seasons close.

High-grade stock, grown and graded to our own standard, which we originated and adopted many years ago. We shall be pleased to supply your wants.

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PEACH, APPLE, PEAR, CHERRY, PLUM, CALIFORNIA PRIVET in 1 and 2 year fine stock.

ORIENTAL PLANES, NORWAY MAPLES, AMERICAN ELMS, SILVER MAPLES, HORSE CHESTNUTS, ETC.

Will make prices right on Peach and Privet in carload lots for early orders.



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## Oriental Planes All Sizes From 1 1/4 to 2 1/2 inch Caliper

12000 Kieffer Pears, 5 to 7 ft., 3/4 in. and up  
2500 " " 4 to 6 ft., 5/8 in. and up  
2500 Rossney Pears, 5 to 7 ft., 3/4 in. and up  
4000 Yellow Transparent Apples, 1 1/8 in. and up  
16000 York Imperial Apples, 1 1/8 in. and up  
15000 Stayman's Winesap Apples, 1 1/8 in. and up

DOUBLE FLOWERING PEACHES  
DOUBLE FLOWERING JAPAN CHERRIES  
WEeping JAPAN CHERRIES  
FLOWERING APPLES  
ASPARAGUS, STRONG 2 YEARS

Large and complete assortment of Ornamental Trees and Flowering Shrubs, etc.

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Red Star Brand Raffia is the most satisfactory brand on the market. Guaranteed high class quality at a reasonable price. We can also supply other brands. Send for our Price List.

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We will have our usual supply: Mahaleb Cherry; French, Japan, and Kieffer Pear. Myrobalan Plum. French Crab Apple and Quince Seeds to offer this year. Mazzard Seeds are very scarce. All orders for fruit seeds should be placed early.

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A most complete assortment of Evergreen and Deciduous Tree and Shrub Seeds. All seeds fresh and of good germinating quality. New catalogue ready September 1st.

### Small Stock for Lining Out

We are booking orders now for Spring delivery. Let us know your wants.

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Fall Trade List ready about September.

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Wholesale Nurserymen and Seedsmen

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Wanting FRUIT TREE SEEDS and EUROPEAN Forest Tree Seeds of the very best quality at low prices should write for special offers to

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Offers of American Tree Seeds appreciated.  
Code 5th Edition A. B. C. used.

A Large Stock of

**Apple, Pear, Cherry and Peach  
Grape Vines, Blackberry and  
Raspberry Plants**

And a general line of ORNAMENTAL TREES and SHRUBS. All stock clean and thrifty, the best that can be grown.

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500,000 Manetti Stocks  
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100,000 Andromeda florabunda  
60 Acres of Hybrid Named Rhododendrons.  
Copper Beech Seedling and grafted in large quantity.

All guaranteed first grade quality.  
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Growers of a complete line of

### GENERAL NURSERY STOCK

Write us for quotation on California Privet 1 and 2 year, extra fine

PEACH SEED—Tennessee and North Carolina Naturals. We have a few hundred bushels we are offering at market prices.

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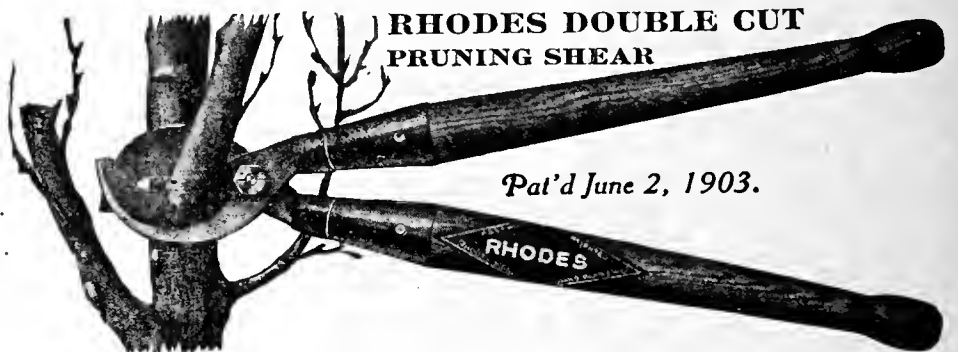
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INCORPORATED 1902

**THE OFFICIAL ORGAN OF THE AMERICAN ASSOCIATION OF NURSERYMEN**

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

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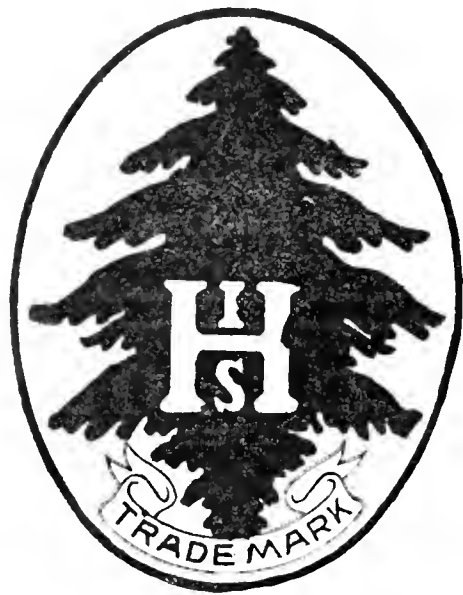
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Red, Black, Yellow, and Purple Raspberry Plants; Blackberry; Dewberry; Downing, Pearl, Josselyn, and Houghton Gooseberry Plants, one and two year, No. 1; 150,000 Rhubarb, one and two year, No. 1, whole roots and divided; Horseradish Sets; Gooseberry layer plants of Downing, Pearl, Josselyn, Houghton, and Mt. Seedling. An extra large stock of Blackberry Root Cutting Plants for late fall shipment. Trade list ready Sept. 20th.

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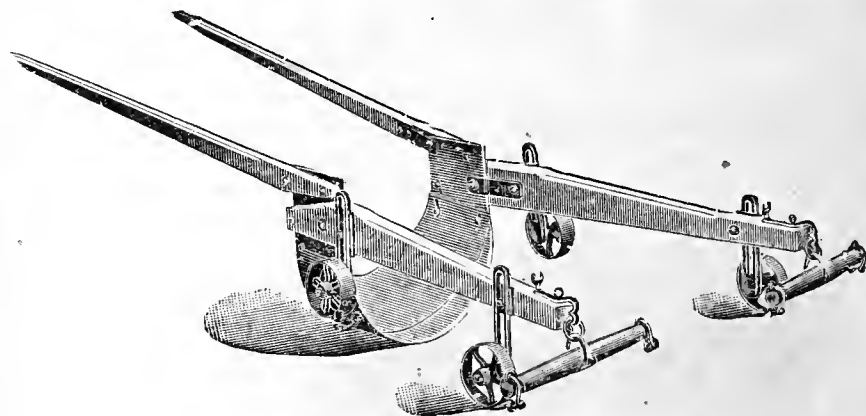
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# Signs this Fall Indicate that Apple Trees will be in Demand next Spring

As a general rule when a farm crop is short and the prices are high, the following two or three years see a big planting of that particular crop.

The season of 1913 has not produced a normal quantity of apples. The Eastern states have about 40 per cent. of a normal crop, and the West seems to be in no better shape. Prices are high—perfect, flawless fruit, bringing Four Dollars a barrel. And there isn't enough to supply the demand at that price.

These conditions will stimulate interest in fruit growing, and Apple trees are bound to be in demand. There isn't any danger of over-production of this handsome, healthful fruit, and good fruit will bring good prices anywhere at any time. Orchardists are sure to put in trees if you will help drive out the over-production scare which was started by men who didn't know the market.



Apple Trees loaded like this make real money.  
Your trade will appreciate such stock.

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We have a reasonable supply of strictly Harrison-grown one and two-year Apple trees. If we have your order this fall or in early winter we will reserve the cream for you. When you send Harrison Trees to your customers you know you are perfectly safe, for we guarantee every tree to be true to variety and in first-class growing condition. Let us have your order soon for these varieties, and any others you will need:

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Ben Davis  
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Gano

Gravenstein  
Grimes' Golden  
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Nero

Red Astrachan  
Rome Beauty  
Stark  
Winesap  
Wolf River

Wealthy  
William's Early Red  
Winter Banana  
Yellow Transparent  
York Imperial

## Peaches Are Going to be Planted, Too

Apples aren't going to be the "whole show," for lots of orchardists don't want to wait six or seven years for the apple trees to produce. So Peaches are set as fillers. Big orchards are being planted, too, for there is just about as much money in Peaches as in Apples for the man who cares for the trees. Our list of Harrison-grown trees, all budded from bearing trees in our test orchard, includes Carman, Elberta, Belle of Georgia and Crawford's Late.

Prosperity is here for the orchardist—he will sure plant trees, but he is looking more carefully than ever to the stock he buys. You can get your share of the business if you furnish the kind that is right, true, vigorous, guaranteed—Harrison's.

**Harrison's Nurseries**  
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# THE NATIONAL NURSERYMAN



DECEMBER, 1913

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

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**BLACKBERRIES**—Large stock root-cutting plants.

**ORNAMENTALS**—A select lot of Silver Maple, 2 to 2½-in.,  
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**PRIVET**—California, Ibota, Amoor River North.

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RHODODENDRONS, HEMLOCKS, WHITE  
PINES, BOX BUSH. A general collection  
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ALSO

NORWAY MAPLES, PIN OAKS, IBOTA  
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**Grow the Better Kind of Trees**

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**MULBERRIES,** well branched trees, free  
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Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses, Vines and Plants, Grapes, Gooseberries, Small Fruits, Bulbs, Seeds, Palms and other tender Greenhouse Plants

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TREE BOX, 3 to 6 feet

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63 Years 700 Acres

Apple Seedling  
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We have a very fine stock of Althea, both  
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Cercis canadensis Weeping Mulberry

### FRUIT AND NUT TREES

Apples, leading sorts Peaches, never offered better stock  
Mulberries, grafted Spanish Chestnuts  
Figs Nectarines  
Olives Almonds  
English Walnuts Japan Walnuts

We grow a general line of nursery stock for the northern as well as the  
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**P. J. BERCKMANS CO., Incorporated**  
FRUITLAND NURSERIES AUGUSTA, GEORGIA  
Established 1856. Over 450 acres in nursery.



## The Best Tree Digger on Earth



Used and Recommended by Leading Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

**Stark Bros. Nursery & Orchards Co.**

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2. We grow all the stock we sell—
3. Moderate prices. Catalogs free—
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This stock is especially adapted to the most severe usage, being thoroughly waterproof & weather-proof. "Once used, always used."

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Wholesale Nurseries  
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We offer for Fall of 1913  
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**PEARS**—Kieffers, one and two years old. A much smaller crop than heretofore.  
**CHERRIES**—On Mazzard. Two year, Bing, Lambert, Napoleon, Black Tartarian.  
**CHERRIES**—On Mahaleb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.  
**PEACHES**—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.  
**ROSES**—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.  
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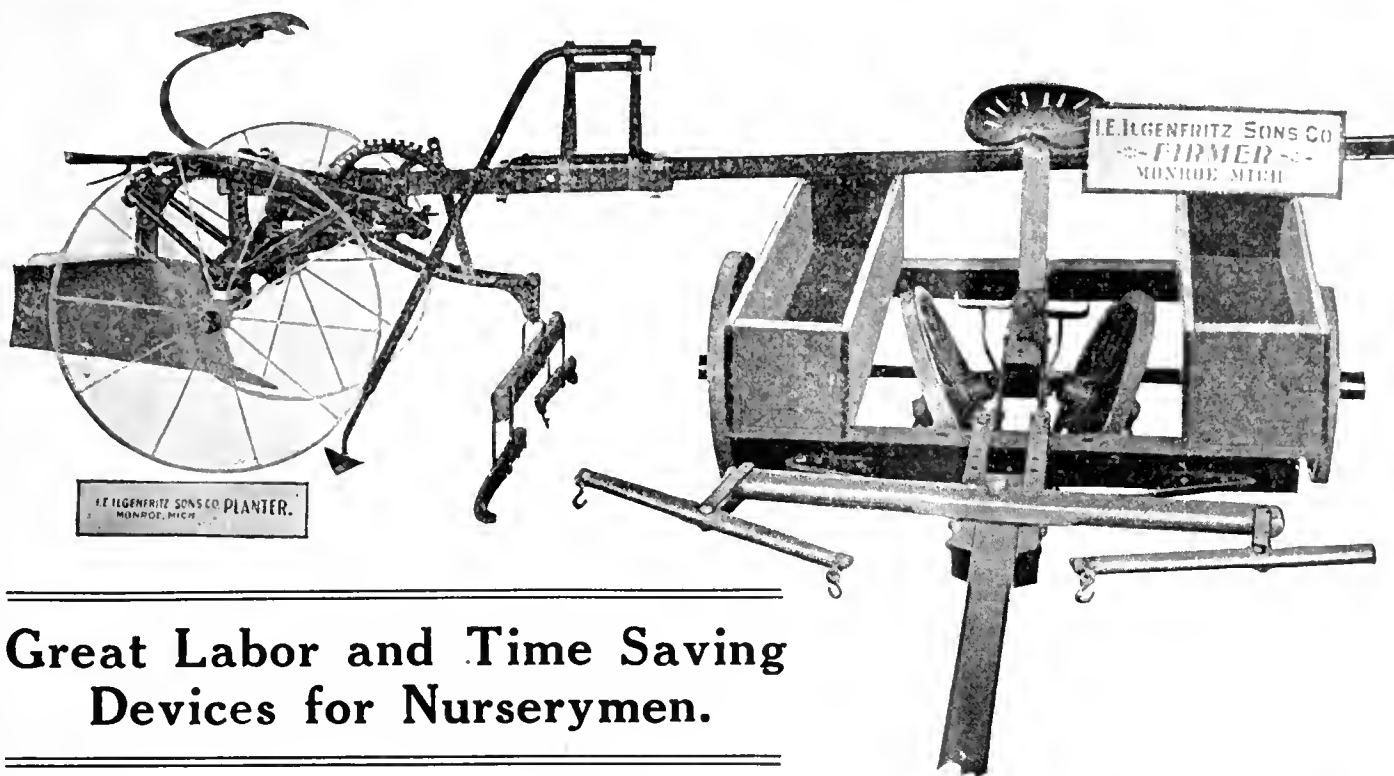
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We are pleased to offer for Fall 1913

Peach Trees, 1 year, 35 varieties

Apple, 2 year, all grades

Apple, 1 year mostly buds

Cherries, 2 year, general list sour

Pear, 1 and 2 year, all grades

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Can furnish the above in carload lots or less, also

Grapes, Currants, Gooseberries, Catalpa Speciosa, Carolina Poplar  
Ornamentals in good assortment

**WE WOULD MAKE VERY ATTRACTIVE PRICES ON PEACH  
TREES IN CARLOAD LOTS.**

Please submit list of wants for prices. We have a few N. C. Natural  
Peach Seeds to offer. Crop 1912, also Crop 1913.

We have a splendid stock of

## Grape Vines

and other small fruit plants for the Nursery  
trade, graded up to the highest standard  
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**CAROLINA POPLAR**, 10 to 12, 8 to 10, and 6 to 8 ft.

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# The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

Vol. XXI.

ROCHESTER, N. Y., DECEMBER, 1913

No. 12

## GROWING NURSERY STOCK IN CALIFORNIA

### THE CALIFORNIA NURSERY COMPANY'S PLANT AT NILES

Most eastern nurserymen have little conception of nursery work as carried on in California and it was with interest that

The various varieties of Franquet and other improved Walnuts are also a specialty and are grown in enormous quantities, while everywhere large blocks of French Prune are seen. Mr. Ebberling grows much of his Prune on Almond



ENTRANCE TO CALIFORNIA NURSERY CO., INC., NILES, CALIFORNIA

your correspondent took the trip from San Francisco to Niles. These nurseries were founded in 1865 at San José by the late John Rock and were successfully conducted by him until 1884 when he started the plant at Niles after closing out the San José establishment. Mr. Rock died in 1894 when the nursery was bought out by Mr. Ebberling.

At the present time the plant covers some 600 acres wholly devoted to growing fruits and ornamental trees and shrubs for California and other Pacific coast States trade.

Palms of every description thrive here to perfection and are grown in great quantities, being one of the specialties for which the nurseries are noted. Specimens thirty feet or more in height are common all over the place and a long avenue of these extend on either side of the driveway leading from the main highway to the office, while thousands of plants from three to fifteen feet high are growing in the nursery row.

Standard Roses are grown in great quantities. Even the stocks are produced on their own grounds.

stocks as he claims that they stand drought better than when worked on Plum.

That Mr. Ebberling believes in producing his own "raw material" instead of importing it is amply borne out by the fact that he grows every year, about 100,000 Mannetti Rose, 500,000 Myrobalan Plum and 300,000 Almond stocks, these all for his own use.

And they can grow these stocks as good and as well as they can be produced in any French nursery. The blocks of these seedlings were a revelation to your correspondent.

They go even further, they not only grow their own seedlings, but they grow their seed as well. One large orchard of mature trees produced sufficient seed last year to grow the 500,000 Myrobalan Plum.

But Mr. Ebberling is not satisfied to have just a fine, well established nursery. He wants to be sure that what he grows is true to name and for this purpose he has a large plantation of bearing fruit trees in all varieties from which his buds and

grafts are taken. He is constantly adding and testing new and untried varieties and in this he is largely assisted by the United States Government from which he receives and tests many new varieties.

To the lover of rare and unusual trees and shrubs, the nurseries are a paradise. Beautiful specimens of *Cedrus Atlantica glauca* ten to twenty feet high are numerous and these plants seem to have a more bushy habit than those which we find growing in the east.

Near the office is growing a specimen of the Matilija

Poppy, *Romneya Coulteri*. It must be ten feet high and as much as nine broad. All summer it is covered with a great mass of large white flowers, many of these flowers measuring eight inches in diameter.

The office of the California Nursery Company is a large, low, roomy building, built of concrete. It was planned with the idea of convenience and economy in handling the business of the company. Passing through the front door you enter the main or receiving room. On either side of this are situated the several private rooms of the officers.

## ROSES

### Portion of Paper Read Before Meeting of the Mississippi Nurserymen's Association

By S. W. CROWELL, Roseacres, Miss.

Throughout the whole range of ornamental plant life no section has received the attention of the hybridizer as has been given the rose during the past twenty-five years. Each season finds more than one hundred new varieties placed on the market by growers in this country and abroad, each and all struggling for favor. However, the majority of these new acquisitions come from abroad after having been grown and tested out as to their reliability as a forcing or bedding rose. Possibly it is well that few of the new varieties find their way into commerce. If each variety sent out were worthy of continued propagation, the grower's head would swim in a sea of perplexity, and further troubles would be added to the present minor troubles that are ever present throughout the process of manufacturing the finished plant.

As my subject is rather a broad one, I feel that you would be interested more in one branch of this subject rather than in the endeavor to cover the whole, and I am sure that no one part connected with the growing of roses for commercial purposes holds greater interest than the pleasure afforded in trying out the new roses each season and comparing them with their sectional types of the old familiar varieties. Fortunately for those living in the South and having the inspiration and the desire to build and plant for the "home beautiful," the most desirable and beautiful types of the rose family are at their best in this climate. We have roses suited to every soil and condition and purpose for which we may desire to use them. To keep abreast with the times it is necessary to produce and offer to the buyer the best variety of plant in any given section, and this can only be done when each grower has this knowledge from actual experience and is actually familiar with the mannerisms of each individual variety he offers to the public. Of course, those who test these new varieties each year and make a specialty of growing novelties, may in a measure, let their experience and observations take the place of the seller's knowledge, but those who deal in novelties of any description are usually prone to color

their subjects with a more roseate hue than the variety merits. To overcome this condition all growers should have their test or trial grounds, selecting each season a few of the leading varieties that have passed into the meritorious group of roses that have been rated high by competent judges at the various rose shows in this country and abroad, or rather buy from the leading firms in this country who have tried out the better varieties several seasons, and are competent to judge varieties of merit as they appear from year to year.

For about twenty years I have made the practice of buying from fifty to one hundred varieties of roses each season, two or more plants of a kind, and these have been planted out under normal conditions, receiving only the same care as given the regular sales plants. This is a work of the keenest pleasure, and I always look forward to the first blooming period with much delight though often with many misgivings, for I frequently find that many sorts heralded "as the best of its color," etc., is a mediocre variety in every sense in this climate, while some not talked of much variety shows merit and class in every respect. To illustrate, Antoine Rivoire, introduced in 1896 by Pernet-Ducher, failed to make any headway for some years, and only recently it has come into favor as a forcing rose under the erroneous name of Prince de Bulgaric. This is one of the best roses grown, but is now only planted in a small way in the South. One of the largest rose firms in this country discarded Mme. Jules Grolez before they found out that it was really one of the best roses of its color, (a deep clear rose.) And so it goes right down the line, there being many, many instances to my own knowledge of our best roses having been held in disfavor or in the background simply because the nurseryman was not familiar with the really good things connected with his business. To overcome this, have a test ground by all means, thereby adding pleasure to your every day life and profit to your business.

I will enumerate a few varieties of the newer or little known roses that I have tested out thoroughly, and know

them to be worthy a place in most sections throughout the South.

#### HYBRID TEAS

This section of the rose family may well be called the leading type. Fully eighty per cent. of all new roses introduced each season are of this type either as bedding or forcing varieties. The hybridizer seems to feel the great possibilities in store for him in his efforts in blending the best blood of these great rose families together, affording an avenue to the grower whereby a greater demand is apparent for his wares, besides giving the buyer the greatest value for his money.

George C. Waud is a rich vermillion crimson, an excellent rose. Hector McKenzie is a great big flower slightly lighter in shade than the preceding variety.

Marie de la Salle is a very free—deep red, one of the most constant bloomers and a splendid bedder. Frau Dr. Staub is a large brilliant red, large and full and sweetly perfumed. Kaiser Wilhelm II promises to be a splendid bedder. In color a rich shade of velvety crimson, shaded black. Mary Countess of Ilchester is one of the most promising roses that I have tried in years. The color is unique and distinct, being a warm crimson carmine which is difficult to describe. It is



MYROBALAN PLUM ORCHARD AT NILES  
California Nursery Co., Inc.

I consider Edward Mawley, as one of the greatest acquisitions in recent years—the great outstanding red in a class almost alone. Its blooms are of enormous size, cup-shaped when expanded, with a breadth and substance of petal of superlative quality. In color, a deep shining crimson overlaid with velvety maroon. Until a few years ago, nearly all red hybrid teas in commerce were faulty in many respects. Weak growth, tender foliage easily attacked by mildew, and color fading into a purple cast, seemed to predominate with all new sorts, but happily for those interested, we now have sorts that are well nigh perfect.

Among other reds which have come to stay, some a little old, others new, may be mentioned General McArthur, one of the very best; Etoile de France, very fine but subject to mildew; Rhea Reid, a splendid garden rose, very double and free. Leslie Holland shows great promise with its free, upright and vigorous branching habit of growth. In color a deep scarlet crimson with buds carried on stiff, erect stems.

of large size, with large smooth petals and deliciously perfumed.

It must be said that there seems to be an overproduction of good pink roses on the market. This is brought about to a great degree by the fact that the greater percentage of crosses come pink in its varied colors. In my opinion one of the finest roses introduced in many years is Mme. Second Weber. It stands out pre-eminently in the way of color, form and fragrance, and when well handled, it is of good growth. It certainly outdistances all other rivals. There are few varieties of roses more perfect in form taken either in the bud or in the fully developed state. The color is an exquisite shade of rosy salmon. It matters not whether this rose be considered in bud, as a partially open bloom or in the open flower; it can only be regarded as one of the loveliest roses in cultivation. Other desirable pinks may be mentioned, Mme. Leon Pain, an exquisite salmon pink; William Shean, not unlike Killarney in form but standing our summer



sun much better; Countess of Gosford, good in shades of salmon and pink; Andre Gamon, a remarkable free flowering variety with deep carmine-rose colorings; Col. Leclerc, a deep rose pink; Dorothy Page Roberts, deep coppery pink; My Maryland, not so new but a splendid rose for southern planting; Phariseer, a magnificent salmon pink, with long pointed buds; Florene Pemberton deep, silvery-pink, opening up like a huge peony, and almost equal to one in size; Reine Carola De Saxe, of the type of La France, but a much better bud; Jonkheer J. L. Mock, clear imperial pink, a sterling novelty in every respect; Lady Alice Stanley, deep coral-rose

center orange-yellow, the whole flower suffused delicate pink. Mrs. Aaron Ward, the grand forcing yellow, has proved to be a splendid bedder. It is distinct in color and formation of bud and flower. The open flower is somewhat flat, but the bud is particularly elegant in shape. The color is a rich, Indian yellow, with salmon tints at the edge of the petals. Mrs. Alfred Tate is a fascinating variety, a good grower and constant in bloom. The color is coppery-red, shaded fawn, with a distinct ochre-yellow shading at the base of petals. Mrs. A. R. Waddell is among the best of the really decorative varieties. Good in foliage, growth and open bloom. In



OFFICE OF CALIFORNIA NURSERY CO., INC.

combined with light flesh; Miss Cynthia Ford, bright deep pink, very large, perfectly formed and sweetly perfumed; Radianee, rosy-carmine, large and very full, free and constant.

The above varieties are among the front rank of good pinks, and while I could enumerate many others that are just as good or may eventually surpass them, these are worthy of extended trial.

There is always a dearth of good yellows, but recent years have added some of our best forcing and bedding roses in the section of yellows. Not a new rose but one of our best yellow hybrid Teas is Mme. Ravary. This variety came out in 1899, but has been overlooked by the growers in this country until very recently. Its main drawback is the difficulty in propagation, which will always make it scarce. In color it is a beautiful golden yellow, opening full orange yellow, good buds and open flowers. Duchess of Wellington is a deep saffron-yellow, fading into a coppery-yellow as the flower expands. A delightful color which is of great substance. Harry Kirk is a sulphur-yellow passing into a lighter shade as the flower expands,—a splendid rose. Mme. Melanie Soupert, probably unequalled in bud form by any rose in existence, with an ultra-refined peony shaped developed flower, is a superbly grand variety. In color a golden-yellow,

color the buds are rosy-scarlet, opening reddish-salmon, reverse of petals rosy-scarlet. Melody is a marvelously free blooming yellow, and is a rose of the highest merit. Mme. Jenny Gillemot is decidedly one of the best bedding yellows. Of strong, vigorous growth, good foliage, persistent bloomer, it is the rose par-excellence of its type. In color it is deep saffron-yellow, opening canary, with darker shadings. Sunburst, the new forcing yellow, holds out great promise of being among the best of the yellow bedders. The color is orange-copper or golden-orange, edge of petals lighter. This variety is magnificent in bud and belongs to the class of giants as to size of bloom. Other good yellow Hybrid Teas, are Marquis de Sinety, and unusually good variety. Mme. Constant Soupert, Mme. Valere Beaumez and Frediek Harmes.

In the light shades there are many meritorious varieties worthy of extended trial. I will mention only a few that have shown real worth.

Florence Edith Coulthwaite could be classed as a substantial fancy variety. The blooms are large and full, perfectly imbricated, and in color, a deep cream, stippled with bright rose on the inside petals, the whole reflected with orange and peach. Lady Quartus Ewart is a pure white

variety of great promise. Double White Killarney is a splendid bedder when properly handled. Helen Watting, white with base of petals yellow, is a most promising bedder. Ethel Malcolm, a large ivory white, Alice Lemon, Alice Graham, and Mrs. Amy Hammond indicate qualities of the good bedding type.

#### TEA ROSES

The class of rose dear to all rose growers in the South is the Tea Rose. With such varieties as Pink and White Cochet, Helen Good, Duch. de Brabant, Mme. Lombard, Saffrano and William R. Smith, this type will ever be the true representative type in our southern climate. This section of ever-blooming roses seems to embody every delicate tint and color of the rainbow, combined with vigorous growth, strong, healthy, leathery foliage, so resistant to mildew, and persistent blooming; practically all are highly perfumed, an attribute very essential to a perfect rose.

A few of the best varieties of recent introduction are very promising, and among these may be mentioned: Molly Sharmon Crawford, a rose of snowy whiteness; Mrs. Hubert Stevens, which appears to be an improved Niphetos; Alexander Hill Gray, a very floriferous lemon yellow variety that will make its mark as a most desirable bedder; Hugo Roller, another good lemon-yellow variety; Mrs. Foley Hobbs, one of the finest Teas of recent introduction, which is a veritable giant, in color delicate ivory-white; Lady Hillington, an intense deep yellow, a rose of general merit that will prove a wonderful bedder, being a flower of great substance and holding its color longer than any yellow that I have ever tested. Miss Alice de Rothschild is heralded as the Bush Marechal Neil. I have tested this variety but one season, and it promises to be a reliable bedder. It is a free bloomer, and holds its color well and is deliciously fragrant. Another good Tea of recent introduction is Mrs. Dudley Cross. It is not unlike White Cochet, and appears to be an improved Marie Van Houtte. The open flower is well finished and is one of the largest in this section.

Of the new varieties of tender climbing roses suitable for Southern planting, among the most desirable may be mentioned: Aline Schneider, a splendid climber belonging to the yellow section of Teas. Climbing Mme. Welche, Climbing Helen Gould, Climbing Gruss an Teplitz, Mme. Louise Leroy, a splendid creamy white variety and Climbing White Cochet. The outstanding white in the affections of the people is White Cochet, and if this climbing form becomes as popular as its parent, the demand will never grow slack.

In the Hybrid Perpetual section, there has not been any recent variety introduced of decided merit. Among the best may be mentioned, Avoca, a brilliant velvety-crimson variety classed in England as a Hybrid Tea; Claudius, bright glowing rose, globular and of good form; Mrs. Stewart Clark, bright cerise-pink or cherry-pink; Barbarossa, pure carmine-red, and His Majesty, dark deep crimson. These varieties, no doubt, will prove their worth as Barbarossa and His Majesty appear to be in great demand by those handling the newer roses, and only roses of decided merit are desired by the buyer.

A class of rose coming into great favor as a pot plant, bedding or as edging

for borders, is the Dwarf Polyantha, commonly known as Baby Rambler Roses. Atropurpurea is a most promising variety carrying heavy bunches of deep purplish-red flowers. Baby Tausendschon is the bush form of Tausendschon, one of the best Ramblers, grown and has the same charm in the variable coloring of its flowers as the parent, being firm white delicately flushed rosy-carmine. Orleans Rose is showy and very pretty with its dainty, charming full founded habit. In color it is deep cerise or Geranium pink, an irresistible color. Erna Teschendorff is a rich brilliant, charming red, and is heralded as the variety that will supersede.

Another old variety coming into popular favor again is Mlle. Carrie Brunner. This is a perfect rose in ever respect, and while differing in make-up from later introductions, it is



LARGE PALM AT NILES. PHOENIX CANARIENSIS.  
California Nursery Co., Inc.

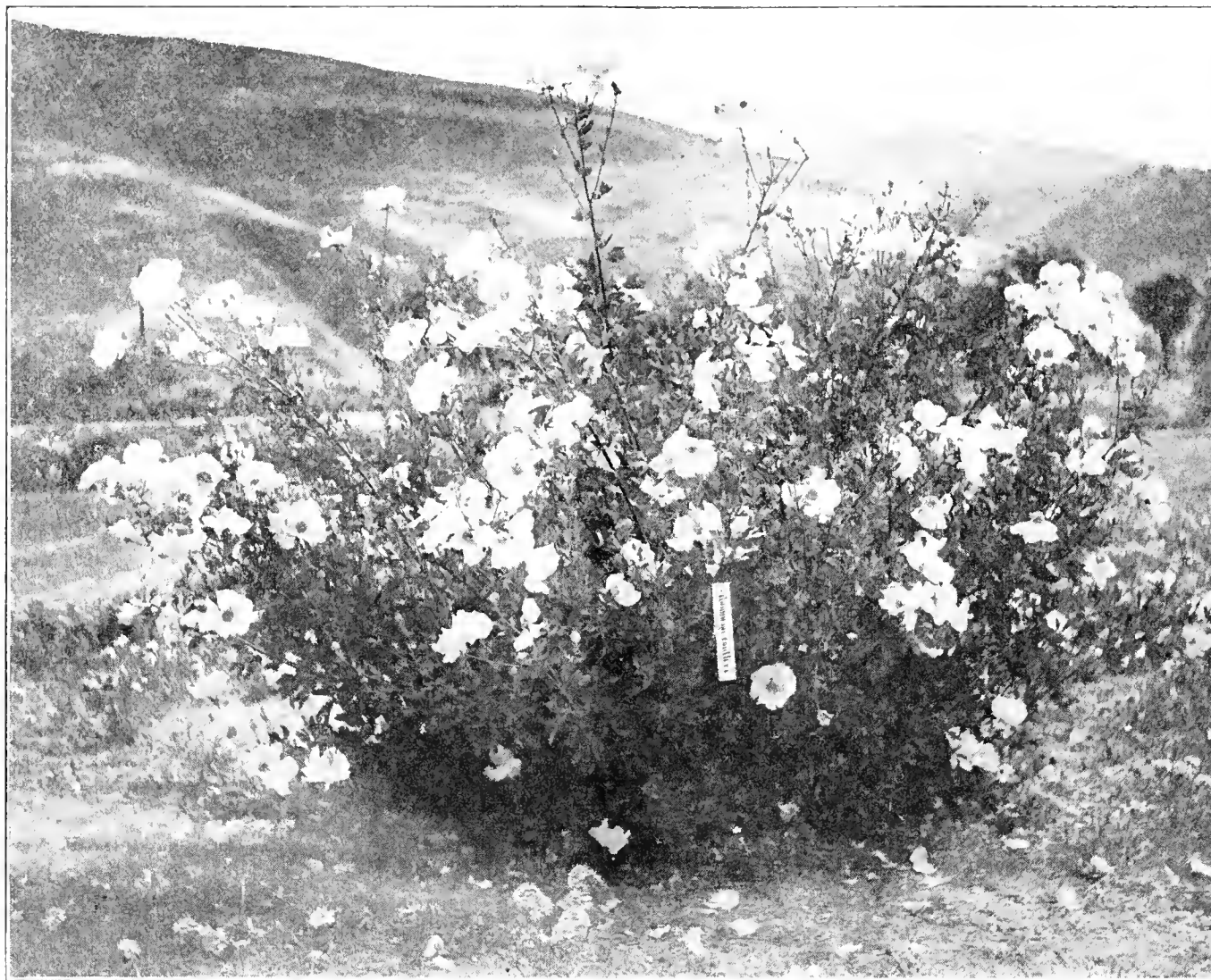


suited to any purpose for which these sterling varieties may be used.

A type of rose forging to the front rank of desirable garden roses, especially throughout the North and West, but suited in every way for Southern planting, is the Rugosa and its hybrids. For low hedges, or planted in groups or as single specimens, no type of rose gives a more rugged value. The growth is very vigorous; the foliage is healthy, and maintains that glistening, shining effect so much desired—until frost. A few varieties that appear to have an excess of Hybrid Perpetual blood in them are occasionally subject to mildew, but

bright satiny pink; Hansa, double red; Souvenir de Pierre le Pedrieux, bright vinous red; Delicata, soft rose; Souvenir de Philemon Cochet, an improvement on Blanc de Coubert and Mme. Labori, deep pink, are all desirable garden roses, and highly suited for parks or any extended planting where hardiness, vigor, free blooming and ornamental effects are desired.

In hardy climbers suited for effective planting, there are three varieties that may well be termed the "Three Graces." In Dorothy Perkins, White Dorothy Perkins and Red Dorothy Perkins or Excelsa, we have the ideal climbing or



MATILJA POPPY ROMNEYA COULTERI  
California Nursery Co., Inc.

as a whole this type of rose is worth extended planting in gardens of any size. During the past ten years I have tested out possibly thirty varieties, and have not found a mediocre variety in the lot. It appears to be the only type of rose that never has an off season. Always ornamental and constant in growth and in bloom, many varieties have flowers that compare favorably with the best of the Hybrid Perpetuals. Of the older varieties, you no doubt, are familiar with Alba and Rubra—the single forms—Mme. Georges Bruant, Belle Poitevine, Agnes Emily Carmen and Blanc de Coubert. In the newer sorts may be mentioned Conrad F. Meyer, a double variety almost equaling La France in form and color, and its white form, Nova Zembla. Atropurpurea, a single flowered variety which in color is a deep blackish crimson, is a most beautiful variety; Mrs. Anthony Waterer, semi-double deep red; New Century, light deep pink, and its white form, Sir Thomas Lipton, are splendid varieties. Magnifica is a deep bright red, very free and constant; Mme. Chedane Guinoisea,

Pillar rose. When well grown, and they are of the easiest culture, no section of roses gives a greater show when in bloom than the Hybrid Wichuriana type. This type of rose has its place in formal or informal gardening, and always proves to be a source of the keenest delight when in full bloom. During the past few years the demand for this class of rose has been quite heavy and constant throughout the South, apparently finding the same favor as is given the ever-blooming types. Owing to the resistant foliage as regards to spot and mildew, the type is better suited to our hot, trying summers than is the Rambler or other Hardy common types. Another desirable variety in this class is Alba Rubrifolia. With its shining green foliage, and perfect creamy-white buds opening into an expanded flower like a Camelia, I know of no other rose quite so good. Gardenia, which may be described as a miniature Marechal Neil, in color and formation of bud, is also a pleasing variety and is very effective.



To those of you interested in the growing and selling of roses, I am sure the above list will serve the purpose of this paper and prove a fruitful source for further investigation and extended trials. Frequently, it takes many years of toil and observation to find the way to overcome some demerit in the growing and handling of some meritorious fruit or flower that is apparently kept in the background by its peculiar mannerisms. But, as our surest pleasure comes from the mastering of the small details that stand behind the veil of mystery, so research and experimentation are always worth while for evidently the appealing force that eventually makes the skilled artisan the out standing fellow of his craft lies here.

And not alone is this kind of labor fruitful for the individual, but the growing of any variety of plant or flower in the best varieties suited to the needs and requirements of any given section is contagious. Honest effort along this line will eventually bring about the highest attainment pertaining to and involved in this work in bettering the nursery conditions in this state in an ornamental way as well as all allied interests. What tends to elevate public taste tends to elevate the quality of the workmanship necessary to satisfy that taste, and as the quality of the product of industry improves, its markets widen and the reward increases.

Now I will leave you with the words of Dean Hole, who, in his delightful "Book About Roses," said "He who would have beautiful roses in his garden must have beautiful roses in his heart. He must love them well and always. To win, he must woo, as Jacob wooed Laban's daughter, though drought and frost consume. He must have not only the glowing admiration, and the passion and enthusiasm, but the tenderness, the thoughtfulness, the reverence and watchfulness of love."



#### JOHN RICE

John Rice, reputed to be the oldest nurseryman at Geneva, N. Y., died November 4th, at his residence on West William street. He was 70 years of age and was engaged in the nursery business for eighteen years. He retired from business seven years ago.

He is survived by a daughter and two sons.

#### SUPT. MILTON D. STEELE

Milton D. Steele, superintendent of the State Tree Nursery, Geysers, died November 7th, at the Saratoga Hospital. Mr. Steele was forty-three years of age.

He is survived by a widow and four children.

#### FRANK H. VICK

Frank H. Vick, a son of the late James Vick, of Rochester, died October 10 at the residence of his daughter, Mrs. H. S. De Mott, 44 Irving Place, Rockville Center, L. I., at the age of 61. He was a landscape gardener and had charge of the grounds surrounding government buildings in New York city. He was born and educated in Rochester and was associated

with the business of his father, James Vick, before entering the government employ.

#### TREE SEED NOTES

The crop of seeds harvested this season will be about the same as in past years. Some kinds of trees are again producing a good crop of seeds, while others are a failure.

The *Acer saccharinum*, Sugar Maple, has not produced any seed whatever this year, the entire crop having been blasted before maturing. *Larix Americana* is also a failure. A good crop of cones set last spring but the collectors found upon gathering them that the contents were of poor quality. The seeds did not test over five per cent. of good germinating quality.

Magnolia seed is also of poor quality this year so the supply will not near equal the demand. *Abies concolor*, California Silver Fir, seed is also reported to be scarce as well as several of the pines of the Pacific Coast section. *Abies balsamea* seed is also a total failure, none of the collectors being able to obtain a single pound of this seed.

American collectors report an abundance of 1913 crop of *Pinus strobus*, White Pine, and they state that it is of the highest germinating quality. Here is a chance for nurserymen and foresters to replenish their stock of this fine lumber tree. Collectors also report a good crop of *Pseudotsuga Douglassi*, green variety, and state that the quality is very fine. *Pinus Banksiana* is also producing a good crop. *Pinus palustris* is now being extracted from the cones and there seems to be a good supply. Foreign countries are now planting considerable quantities of this seed for lumber purposes and I believe it is a good tree for this, and should be planted a great deal more than it is.

Acorns are now nearly all harvested and should be planted as soon as possible so that they may get frozen properly and be in condition for an early start in the spring, and other hard shell seeds should be put in the ground for the same reason.

There is a shortage of fruit seeds this year. Mahaleb and Mazzard cherry seeds are very scarce. Keiffer Pear also as most nurserymen know there was a very poor crop of this fruit this season. Reports just received from foreign collectors state that there will be no French pear seed this year as the crop of this fruit was an entire failure. This looks like a shortage of French Pear Seedlings for Spring, 1915, and should give the growers a chance to clean up any surplus stocks that they may have.

The crop of Myrobalan Plum seed is about standard and the seed is of first-class quality. Importations are now being received in this country and the seed should be planted as soon as the ground is ready.

Reports on the crop of French Crab Apple and Japan Pear seed seem to be to the effect that there will be sufficient to fulfill all requirements.

A. A. P.

#### AMERICAN ASSOCIATION OF NURSERYMEN

The thirty-ninth annual convention of the American Association of Nurserymen will be held in Cleveland, Ohio, June 24-26, 1914. The Hollenden Hotel has been selected as headquarters.

JOHN HALL,  
Secretary.

# The National Nurseryman

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It circulates throughout the United States, Canada and Europe.

Official Journal of American Association of Nurserymen

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

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Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

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ROCHESTER, N. Y., DECEMBER, 1913.

## AMERICAN ASSOCIATION OF NURSERYMEN

PRESIDENT—J. B. Pilkington, Portland, Ore.; Vice-President, Henry B. Chase, Chase, Ala.; Secretary, John Hall, Rochester, N. Y.; Treasurer, Peter Youngers, Geneva, Neb.

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TARIFF—James McHutchison, New York City

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LEGISLATION WEST OF MISSISSIPPI RIVER—Peter Youngers, Geneva, Nebr.

CO-OPERATION WITH ENTOMOLOGISTS—L. A. Berckmans, Augusta, Ga.

PROGRAM—John Watson, Newark, N. Y.

EXHIBITS—

ARRANGEMENTS—

PUBLICITY AND TRADE OPPORTUNITIES—W. P. Stark, Neosho, Mo.; Jefferson Thomas, Harrisburg, Pa.; Orlando Harrison, Berlin, Md.; C. M. Griffing, Jacksonville, Fla.; G. C. Roeding, Fresno, Cal.; H. D. Simpson, Vincennes, Ind.; James M. Irvine, St. Joseph, Mo.

ROOT KNOT—E. A. Smith, Lake City, Minn.

MEMBERSHIP—State Vice-Presidents.

## STATE AND DISTRICT ASSOCIATIONS.

American Nurserymen's Protective Association—President, Henry B. Chase, Chase, Ala.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.

American Retail Nurserymen's Protective Association—President, H. W. Marshall, Arlington, Nebraska; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.

Association of Oklahoma Nurserymen—President, J. A. Lopeman, Enid, Oklahoma; secretary, C. E. Garee, Noble, Oklahoma.

California Association of Nurserymen—President, Frank H. Wilson, Fresno, Cal. Secretary, H. W. Krukeberg, Los Angeles, Cal.

Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.

Connecticut Nurserymen's Association—President, T. E. Burroughs, Deep River, Conn.; secretary, F. L. Thomas, Manchester, Conn.

Eastern Association of Nurserymen—President, Wm. C. Barry, Rochester, N. Y.; secretary-treasurer, William Pitkin, Rochester, N. Y. Meets annually in January.

Idaho Nurserymen's Association—President, Anton Diedricksen, Payette, Idaho; secretary, J. F. Litooy, Boise, Idaho.

Mississippi Nurserymen's Association—President, J. R. Woodham, Newton; Vice-President, W. A. Woods, Tomnolen; Sec'y-Treas., R. W. Harned, Agr. College.

National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.

New York State Nurserymen's Association—President, E. S. Osborne, Rochester, N. Y.; secretary, John Watson, Newark, N. Y.

Ohio Nurserymen's Association—President, W. N. Scarff, New Carlisle, O.; secretary, W. B. Cole, Painesville, O.

Oregon—Washington Association of Nurserymen—President, C. F. Breilhaus, Richland, Wash.; secretary, C. A. Tonneson, Tacoma, Wash.

Pacific Coast Association of Nurserymen—President, Richard Layritz, Victoria, B. C.; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Meets annually in June.

Pennsylvania Nurserymen's Association—President, Abner Hoopes, West Chester, Pa.; secretary, Henry T. Moon, Morrisville, Pa.

Southern Nurserymen's Association—President, J. R. Mayhew, Waxahachie, Texas; secretary-treasurer, A. I. Smith, Knoxville, Tenn.

Tennessee Nurserymen's Association—President, Chas. Pennington, Rutherford, Tenn.; secretary, G. M. Bentley, Knoxville, Tenn.

Texas Nurserymen's Association—President, C. K. Phillips, Rockdale, Texas; secretary-treasurer, J. M. Ramsey, Austin, Texas.

Western Association of Nurserymen—President, Frank A. Weber, Nursery, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

## SAN JOSE SCALE PARASITE

There is food for thought in the report that a parasite has been discovered and propagated that is effectually destroying the once much dreaded San José scale.

It confirms the stand we have always taken that there never is cause for hysterical alarm and the consequent result of stringent and unjust laws.

Entomologists are on the right track when they seek to control disease and pests by such methods instead of trying to legislate them out of the country.

The doctors of a past generation bled us and doped us; to-day they find out what kind of microbe of life is interfering with our well-being and study to bring back the balance of nature, and it is only by such methods will really effective work be done in the pathology of the vegetable kingdom.

Quarantines are of doubtful value and indicate fright and lack of knowledge rather than an effective preventative.

## THE BRUSH PILE

The brush pile is a very necessary institution but unfortunately one that is not catered to to the extent it should be.

It means dead loss and no nurseryman likes to see the result of years of labor go up in smoke.

The fruit tree grower digs his trees all at one time, grades them, and the brush pile gets what is left over every year, thus starting with a clean slate yearly.

The grower of ornamentals cannot do this except with perhaps a few of the staples for which there is a steady market, and there is always an inducement to grow stock a little larger and get big plants because there is a limited demand for them.

Too often the best are sold out of the block first, leaving the poor stock to grow larger and develop with the hope of finding a customer for it.

It stands there for years often developing into fine specimens as far as appearance goes, but just as often very poor stock to sell on account of not being transplanted frequently enough.

It is unusual when such a method is profitable.

In the first place a good price has to be asked for large specimens and calls for critical examination.

Secondly, the labor and expense of handling is high.

Thirdly, results from transplanting large trees that are not accustomed to being moved are not invariably satisfactory.

That there is a demand for large specimens is true and this should be catered to by growing plants especially for the purpose, transplanting them regularly and carefully guiding their development. Such a method is costly and the results should command prices commensurate.

Half filled blocks, unsaleable trees or plants are the bane of the nursery and really eat up the profits, and unless heroic measures are taken to keep them at the minimum they are bound to lower the standard.

The best trees are invariably dug first, the remaining ones often improve as they grow but the fact remains that the average is lowered.

A good rule is to go through the nursery periodically and take out those that do not come up to the standard.

It often requires much courage to consign to the brush pile stock that has cost many dollars to produce but that has overgrown or perhaps gone back after transplanting.

The nursery with a very clear cut policy as to what is best to grow, how long to grow it, and to recognize the stage at which it is unprofitable to carry the stock longer is likely to prove the most successful.

The practice of transplanting every block of trees, evergreens and trees every three or four years may be costly but it means good stock and keeps the nursery up to the mark.

**THE CLOSE** We have come to the close of another year with its successes and failures, **OF THE YEAR** mirth and tragedy, drought and flood, but in spite of all these has been progress.

There seems to be more harmony, higher ideals, better business principles and the nursery business seems to be slowly forging its way to that position where it rightly belongs.

It has not become the tool of powerful monied interest to be exploited for the benefit of the few, nor has it bred a feeling of discontent between capitol and labor.

Most of us would like to see it a little more homogeneous, bound together a little more closely for mutual benefit and help, but we all realize this must be a growth fed on common sense rather than an arbitrary arrangement.

The American Association of Nurserymen and other organizations are doing wonders towards this end and no doubt in time the Government Departments, State Colleges and Legislators will understand each other better and altruism will largely take the place of selfishness, which so retards progress.

**UNIFORM** In another column we print a communication from Wm. Pitkin, Chairman of **LEGISLATION** Committee on Uniform Legislation, of the American Association of Nurserymen.

It is beyond understanding that it should be necessary for the Chairman to make this appeal. This committee was appointed at the Portland Convention and its purposes have been clearly set forth in the NATIONAL NURSERYMAN.

Every nurseryman is constantly beset with difficulties in the transaction of his business, owing to the operation of various and conflicting inspection laws in the several states, scarcely any two of which are alike, and the burden is becoming heavier each year as new or supplementary laws are enacted.

It is not the purpose of this committee to antagonize or seek to prevent the passage of such laws, but to frame an entirely new law which will meet all necessities, safe guarding the orchardist, as well as the nurseryman, and then seek to secure the passage of this law in every state and cancel existing inspection laws from the statute books.

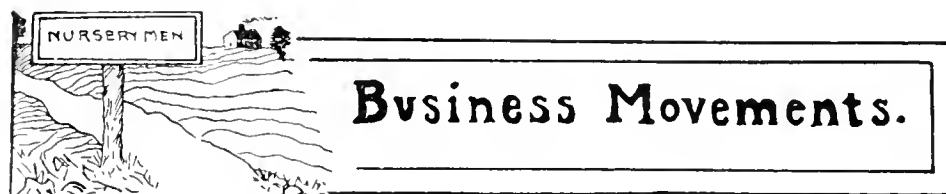
What a relief such a law would be to the nurseryman. What a saving in cash in registration, license and other fees, which now must be paid in several of the states. What a saving in "red tape." And yet while all this must be apparent to the thinking man, hundreds of nurserymen have buttoned their pockets and neglected to contribute a cent

to this great cause, one of the most laudable undertaken by the Association for many years. Surely this must be carelessness and not wilful intent.

Let every nurseryman come forward and do his share toward helping along the good cause. The resolution adopted at the Convention provided that no one man or firm should contribute over twenty-five dollars. It was expected that each one would subscribe in proportion to his means. One, two, five, ten or twenty-five dollars. No amount would be too small. Every dollar contributed will help. Every nurseryman who reads this should not only send in his subscription to Chairman Pitkin, but should make it a part of his duty to urge his neighbor in the trade to subscribe also.

It will require no less than three thousand dollars to carry on this work. The members of the committee are giving their valuable time without compensation.

What will You do?



## THE DAWN OF THE PASSING OF A GREAT NURSERY

The beginning of the end of the career of a great horticultural firm commenced at the sale of the nursery stock at Coombe Wood Nursery, Kingston Hill, at 12 o'clock on Monday, October 13. For upwards of fifty years this nursery has been recognized as the home of a marvellous variety of choice and rare trees and shrubs. For decades Sir Harry Veitch and his predecessors, as heads of the firm of Messrs. James Veitch and Sons, have collected and cultivated every description of tree and shrub that it was possible to discover and to grow, and established them at the charming nursery at Kingston. Every reader of the horticultural papers is cognizant of what has been collected in far-off countries by Messrs. Veitch's travellers, brought home, nursed at Coombe Wood, and thence distributed to all parts of the globe. The value of this can never be fully realized. Horticulture will be indebted to the house of Veitch for years to come. And the end of this great firm is at hand.—*The Journal of Horticulture*.

## POUGHKEEPSIE NURSERY COMPANY ESTABLISHED

A. Tersteeg and W. Godding have established the Poughkeepsie Nursery Company after having bought the stock of The Sunnyfield Nursery Company. They intend to conduct a retail business. Both, are from Holland and know their business thoroughly.

Mr. Tersteeg came to America in 1905 with an experience of general nursery work since boyhood. He has been connected with nurseries in Holland, Germany, France and Italy; and was manager of the Sunnyfield Nurseries since 1911.

Mr. Godding was his assistant since April, 1912, and work and studied in the nursery business for the last eight years.

Both, young, enterprising and energetic have a great future before them in the Hudson Valley.



# THE SAN JOSE SCALE PARASITE

By Professor H. A. SURFACE, Economic Zoologist, Dept. of Agr., Harrisburg, Penna.

"Concerning the parasites for destroying the San José scale, I must say that this subject has not been overdrawn in the least by the papers, nor has it been fully emphasized. I bred these parasites by the thousands, and find several species of them. They are actually cleaning up the San José scale over hundreds of miles in this State. They are not merely checking it, but definitely cleaning it up. I can give you the names of scores of men who are not spraying for the scale during the coming dormant season, because they have no live scale left in their orchards, although previously their trees have been badly infested. In my own orchard I think there is not now a living specimen of San José scale, as I have looked through the trees carefully in vain, using a microscope in the search. I have some old apple trees that were purposely left unsprayed for observation and study, and while they are producing fruit this year, there is not a scale mark on any of the fruit, and not a live scale on the trees.

"We have sent this parasitized material to persons in different Counties of Pennsylvania and to different States. We shall send other specimens by parcel post to persons sending ten cents in postage.

"I shall be glad to send parasitized material where it will help do some good for mankind. I have nothing material to gain and nothing to lose in this proposition, and there is no reason why I should be attacked either by those who claim to have known the parasites for scores of years, yet who are doing nothing to disseminate them practically, nor by those who have known nothing of them, and are making great claim for individual discoveries, which have been too superficial to be noticed. The facts that I have proven are that there are several species of parasites absolutely destroying the San José scale in many of the Counties of the southeastern part of Pennsylvania, and that we are breeding them and disseminating them in a practical way as rapidly as possible. Persons whose orchards have been cleaned up by them recognize this as a fundamentally proper method for destroying the scale pest.

"No one knows how rapidly the parasite will multiply when introduced into another region, nor how long it will be until it will be unnecessary to spray for the scale, but by examination with a hand lens one can easily see the perforated scales, and thus know that the parasites are successfully

working. In sending parasitized material we also send printed directions for its introduction into the trees. These parasites work only on scale insects or the eggs of certain other insects, and will not attack trees or their fruits. Thus, there is no danger attending the parasites or their practical dissemination. It must not be expected that all of the thousands of specimens which we are sending out will live and

multiply, but some of them surely will, and this will be sufficient reward to justify the effort.

"Since we have brought this subject before the public other scientific persons have taken it up in a most fervid manner, and we hope by the co-operation of the different scientific workers over the country to see the parasite as effective in cleaning up the scale in other States as we know they have been in those portions of this State where we have watched them and studied them during the past four years."

Professor Surface in a letter to THE NATIONAL NURSERYMAN further states: "I can name several nurseries in this State (Pennsylvania) where the para-

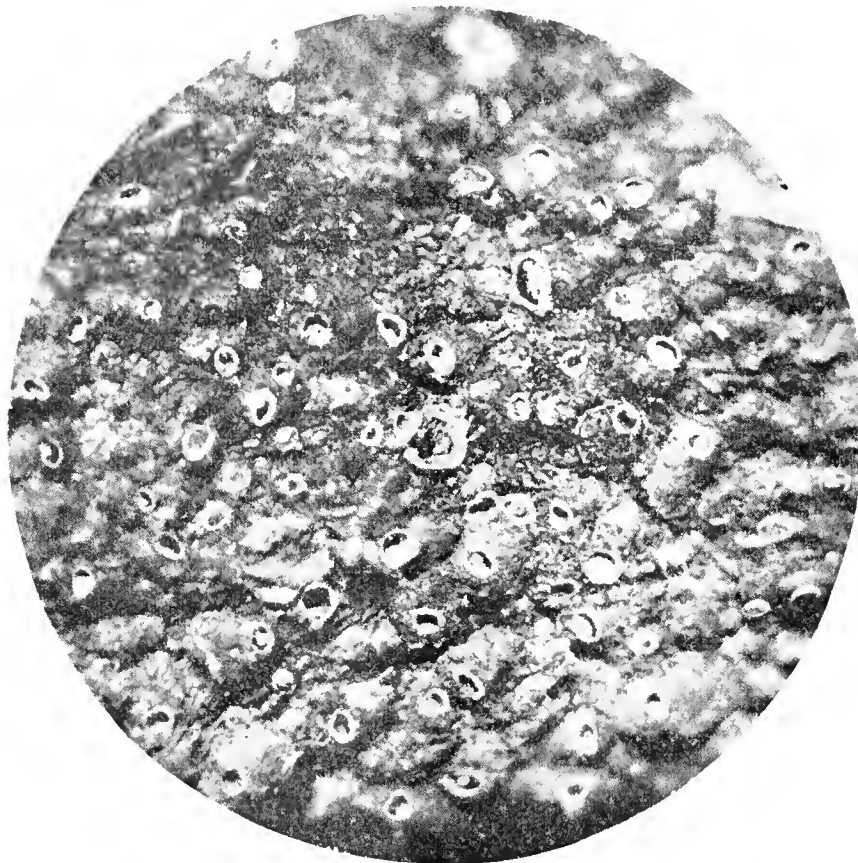
sites have so absolutely cleaned up the scale that we could find no live scale present after most careful search, and, consequently, there is no need of an affidavit of fumigation, nor of the trouble and expense of a fumigating house.

## POSTAGE CHANGES

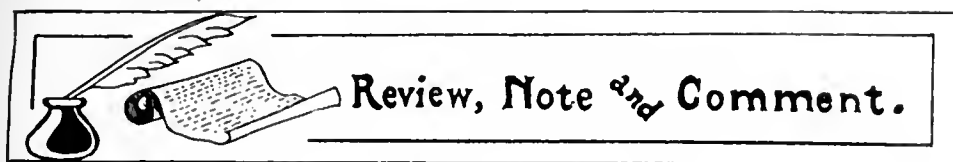
The proposed inclusion of third class mail in the Parcel Post service should be energetically protested as it will increase the executing flat rate on printed books, catalogues and similar printed matter, when mailed in parcels up to four ounces weight fully 100 per cent. W. Atlee Burpee of Philadelphia, states that his postage on 400,000 will be increased from four to twelve cents.

It is pointed out that with the existing low rate for such matter under the postal union laws Canadian and English printers could print catalogues for American firms and mail them to all parts of the United States at a lower rate than the American printers.

Nurserymen should file their objections with the Interstate Commerce Commission, or Third Assistant Postmaster General Dockery, Washington, D. C., who have intimated that suggestions and objections will be given full consideration.



SAN JOSE SCALE PARASITIZED



The William P. Stark Nurseries, Stark City, Missouri, are distributing a catalogue very distinct in its make up. It is a convenient size to carry in the pocket without folding and has over 100 pages. While mainly a fruit catalogue it offers a very good line of ornamentals. As a reference work for the buyer of fruit trees and other stock it does not seem to leave much to be desired.

A number of consignments of bulbs and plants went down on the ill-fated S. S. "Volturno." Among them were consignments from C. Keur & Sons and also consignments for P. Ouwerkerk, Weehawken Heights.

The new Chinese republic has established a department of agriculture and forestry. For a long time China had been pointed out as the most backward nation in forest work.

It is claimed that some of the eucalyptus of Australia are taller than the California redwoods, hitherto considered the highest trees in the world.

There are 55 oaks in the United States, about evenly divided between the east and the west. The eastern species and particularly white oaks are the most valuable.

German foresters are experimenting with Douglas fir from the United States trying to find a variety which will combine the fast-growing quality of the Pacific Coast form and the hardiness of the Rocky Mountain form.

Trees for reforestation are being supplied the landowners of New York by the State Conservation Commission, which has at present over 13,000,000 young trees to be delivered. The trees are sold at nominal prices for planting under regulations set by the commission. They are from two to four years old and include white pine, Scotch pine, Norway spruce, red pine, European larch, white ash, tulip poplar and black locust. The commission also supplies Carolina poplar cuttings and basket willow cuttings. The nursery at East

Onondaga of the State College of Forestry of Syracuse University supplies the larger part of the trees.

The Balsam Fir makes the best Christmas tree because of its regular form and beautiful dark green foliage. Spruce is used also but is not as attractive in form and color as the Balsam. Hemlock, Pine and the Cedars are used occasionally but are not considered equal to either the fir or spruce. Everyone interested should try to prevent clear cutting but should favor thinning of the young forest leaving the best formed, most rapid growing trees on the ground to form the future forest. The thinnings should be made in the densest young stands only and no large open spaces should be left. The State will suffer a great loss if the young spruce and fir forests of New York are clear cut for Christmas trees.

Forestry consists not only in raising trees but in selling them in the best possible form and at a good profit. The New York State College of Forestry is anxious to stimulate proper marketing of the products of the forest of the State. It will be glad therefore to have anyone who is interested in supplying trees for the Christmas tree trade write to the College of Forestry at Syracuse which will do all it can to bring producer and consumer together. Suggestions as to the best means of growing and cutting trees will be given gladly.

The Uruguay National Nursery has presented about 200,000 shade trees to the municipalities of the Republic and these will this year be planted in the various cities and towns.

### A GOOD SUGGESTION

Why do not more nurserymen use the hardy Eulalia Japonica for baling instead of rye straw?

We have sold it for years but know of no one else using it for baling.

Almost every nurseryman has a rocky knoll or some odd shaped piece of ground that cannot be "diggered" which would grow it easily.

Instead of sowing every year as with rye it can be grown with little cultivation, cut at leisure even after thoroughly dry and is taller, tougher and "stays put" better. If cut dry, after a few days in the packing room, springled lightly, it again becomes tough and pliable.

WILD BROS. NURSERY CO.

### "THE MONTHLY SUMMARY OF COMMERCE AND FINANCE" FOR SEPTEMBER, 1913, GIVES THE FOLLOWING REPORT OF IMPORTS OF PLANTS, TREES, SHRUBS AND VINES.

ARTICLES	SEPTEMBER—				EIGHT MONTHS ENDING SEPTEMBER—					
	1912		1913		1911		1912		1913	
	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values	Quantities	Values
Plants, trees, shrubs and vines:										
Fruit plants, tropical and semi-tropical, for propagating purposes .....		4		5		511		12,895		13,957
Bulbs, bulbous roots, or corms, cultivated for their flowers or foliage .....	95,181	773,272	102,474	808,719		1,250,804	244,004	1,237,043	163,107	1,423,380
All other .....		57,211		86,064		727,706		783,907		884,522
Total .....		830,487		984,788		1,979,021		2,033,845		2,321,859

## UNIFORM INSPECTION COMMITTEE

THE NATIONAL NURSERYMAN,

City.

Gentlemen:

I understand from Mr. Youngers that the total subscriptions to the special fund to be handled by the Committee on Uniform Legislation, as authorized by the Portland Convention, only amounts to about one thousand dollars.

If the members of the two associations expect that very much in the way of results are to be accomplished by the Committee, they have got to put up more money.

The first step is to employ a first-class attorney, whose duty it will be to thoroughly and carefully digest the various state laws now in force, and from that information endeavor to formulate a bill which will be generally satisfactory. No cheap attorney can do that work. The Committee thinks that the attorney who does the work properly can earn at least one thousand dollars, and in addition to that amount there will be a considerable amount for expenses by the Committee and the attorney, and after the bill is formulated it will be necessary for the Committee to have conferences with the Federal Horticultural Board, with the representatives of various state organizations, state inspectors and others, and it means a lot of time, a lot of work and considerable expense. The Committee feels that it should have several thousand dollars in sight to take care of the matter if they are expected to carry the work through to a successful completion.

The present list of subscribers is but a very small percentage of the total membership of the two associations. The importance of the work, we think, is realized by every shipper of nursery stock in interstate commerce, and we believe that if the matter is strongly presented by your paper in its December issue and the members are urged to contribute to this fund that sufficient funds can be realized so that the Committee will feel encouraged to go ahead with the work.

The members of the Committee ask no compensation for the time which they propose to devote to the matter, but the necessary expenses will be large, and there is no use in starting in with the work unless sufficient money is in sight to carry it through.

If the members of the two associations feel that the matter is important and should be carried through, they can show their interest and enthusiasm by prompt and generous subscriptions.

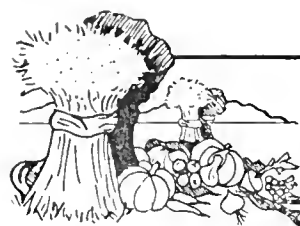
Will you be good enough to take this matter up in your December issue?

Yours truly,

WM. PITKIN, Chairman.

## INJURY TO J. A. LOPEMAN

Mr. J. A. Lopeman, Proprietor of the Enid Nurseries, Enid, Oklahoma, sustained a severe injury to his inner ear on the 27th of October and up to the present time has not been out of bed. The doctor at first had grave fears for his permanent recovery—a specialist was obtained, and he stated it would be slow, but Mr. Lopeman would recover fully. He is slowly improving.



From the U.S.D. of A.

## NEW BULLETINS OF INTEREST TO NURSERYMEN

"Promising New Fruits." By William A. Taylor, Pomologist and Chief, and H. P. Gould, Pomologist in Charge of Fruit District Investigations, Bureau of Plant Industry. Pp. 261-278, pls. 8. (Separate 589, Yearbook 1912.)

"The Chestnut Bark Disease." By Haven Metcalf, Pathologist in Charge of Investigations in Forest Pathology, Bureau of Plant Industry. Pp. 363-372, pls. 4. (Separate 598, Yearbook 1912.)

"The Water Requirement of Plants." I. Investigations in the Great Plains in 1910 and 1911. By Lyman J. Briggs, Biophysicist in Charge of Biophysical Investigations, and H. L. Shantz, Plant Physiologist, Alkali and Drought Resistant Plant Investigations. Pp. 49, pls. 11, figs. 2. (Bulletin 284, Bureau of Plant Industry.) Price, 15 cents.

"The Water Requirement of Plants." II. A Review of the Literature. By Lyman J. Briggs, Biophysicist in Charge of Biophysical Investigations, and H. L. Shantz, Plant Physiologist, Alkali and Drought Resistant Plant Investigations. Pp. 96, figs. 6. (Bulletin 285, Bureau of Plant Industry.) Price, 10 cents.

## WILL HE BE A NURSERYMAN?

There is joy in Augusta, Georgia and the many friends of Mr. and Mrs. Robert C. Berckmans are sending their congratulations on the birth of a son, L. A. Berckmans, Jr., the first Berckmans boy in fifty years.

"Rob" is just as proud and happy as he is entitled to be and warns the "Old Guards" to be ready to receive L. A. B., Jr., as one of the "boys," when he has been suitably educated by his father.

If son L. A. B., Jr., takes to the nursery business, he will be the third generation in direct line to follow the profession.

James McHutchison, New York City, who was recently appointed by President Pilkingtom to the Chairmanship of the Tariff Committee of the American Association of Nurserymen, announces that he has appointed Thomas B. Meehan, Dresher, Pa., and John H. Dayton, Painesville, Ohio as members of his committee.

It is unlikely that there will be any tariff matters to attend to during the coming year, but if anything should develop, Chairman McHutchison and his committee can be depended upon to do everything that may be necessary.

PONTIAC, Mich., Oct. 13, 1913.

Please find enclosed a money order for \$1.00 to renew my subscription for another year.

Although I am not in the nursery business now I value your paper just as much as ever and wish to continue it.

T. D. BUCHANAN.



## CALIFORNIA NURSERYMEN'S CONVENTION

The California Association of Nurserymen held a very successful meeting in the city of Fresno, October 16 to 18, 1913, some 150 delegates being in attendance. An interesting and varied program was carried out, dealing with various phases of the nursery industry. The movement inaugurated by the joint Convention of the American and Pacific Associations held in Portland last June formed a hearty endorsement in the following resolution, which was unanimously adopted:

"Your Committee on Resolutions is of the opinion that nothing that has occurred of late years is of more vital importance to the betterment of horticultural conditions throughout the nation than the movement that has taken strong root for the enactment of uniform horticultural laws throughout the States of this Nation. In view of that fact, it deems it appropriate and expedient that this Association place itself on record as being heartily in favor of the movement. At the joint convention of the American Association of Nurserymen, and the Pacific Coast Association of Nurserymen this matter took tangible form and a fund was at once subscribed which now aggregates about \$3000; of this sum the California delegation at Portland as individuals has subscribed something like \$300; since this sum represents almost in its entirety people who are members of this Association, your Committee feels that this body is not obligated to contribute to any appreciable extent beyond this amount, nevertheless this Committee feels that this movement should receive official recognition by this body; therefore,

*"Be it resolved,* that the Secretary and Treasurer be authorized and sent to the Joint Committee of which Mr. Peter Youngers of Geneva, Nebraska, is Treasurer, the sum of \$25.00 with the assurance of the California Association of Nurserymen that it not only supports the movement heartily, but stands ready to give it all its material and moral support that the exigencies of the situation may demand."

The convention adjourned on Saturday, October 18, with the election of the following officers: President, D. W. Coolidge, Pasadena; vice-presidents, John Vallance, Oakland; T. E. Mabey, Fresno; Walter Birch, San Diego; E. Wightman, Chico; Arthur Cann, San José; secretary-treasurer, Henry W. Kruckeberg, Los Angeles; executive committee, Max J. Crow, Gilroy; Wm. T. Kirkman, Jr., Fresno; R. M. Teague, San Dimas.

San Diego was chosen as the next meeting place in 1914, on which occasion the Association will be the guests of the Panama-California Exposition for at least a part of the time.

## A CORRECTION

We noticed an article in the November issue of the NATIONAL NURSERYMAN stating a new nursery was being established at Muscatine, Iowa, on land purchased by C. H. Chandler of Cedar Rapids, Iowa. We wish to correct this as Mr. Chandler purchased this 234 acres at North Liberty, Iowa, for the purpose of enlarging the Highland Nursery Co., of Cedar Rapids, Iowa, of which he is president.

Yours truly,

Cedar Rapids, Iowa.

HIGHLAND NURSERY CO.

## WESTERN NEW YORK HORTICULTURAL SOCIETY

The fifty-ninth annual meeting of the Western New York Horticultural Society will be held in Rochester, N. Y., January 28-30, 1914. The program will be an unusually strong one, and we anticipate a record-breaking attendance.

JOHN HALL,

Secretary-Treasurer.

Gentlemen:

I hand you herewith postal order for \$1.00 in payment of my subscription to the NATIONAL NURSERYMAN. The first notification got buried on my desk, must apologize for delay in attending to this, am glad you did not short me any copies as I certainly would have missed them. I look forward to the NATIONAL NURSERYMAN from month to month.

With all best wishes, I am,

Yours very truly,

J. B. PILKINGTON.

## SUNNYFIELD NURSERY CO.

UNITED STATES DISTRICT COURT, Southern District of New York. In the matter of Sunnyfield Nursery Company, Bankrupt. In Bankruptcy.

Edward K. Haas, Trustee of the above named bankrupt having filed a report and account and asking that a first dividend be declared, and also asking that his commissions and expenses be set aside and that an allowance be made to his attorney and the attorney for the bankrupt.

It is ordered, that all creditors of said Sunnyfield Nursery Company show cause before me at my office, 54-56 Market Street, Poughkeepsie, N. Y., on the 5th day of December, 1913, at 10 o'clock A. M., on that day why the account of said Edward K. Haas as Trustee, be not examined and passed, and that his commissions be set aside as trustee, and also why a suitable and proper allowance should not be made to his attorney and also to the attorney for the bankrupt, and also why a first dividend should not be paid herein to all creditors who have filed claims in this estate; and no cause being shown, said account will then be examined and passed, and commissions of said trustee will be set aside, and a suitable and proper allowance will be made to the attorney for the trustee, and also to the attorney for the bankrupt and a first dividend be declared.

C. W. H. ARNOLD, Referee in Bankruptcy.

J. H. Skinner & Co., Topeka, Kansas, have a branch at Holdenville, Oklahoma, under the management of P. W. Vaught, from whence they supply their southern trade. This branch is known as the "Capital Nurseries" and is doing a splendid business. Their stock of 500,000 2-year apple trees is rapidly being sold.

## A ROOM WITH A BATH FOR A DOLLAR AND A HALF

The United States probably surpasses any other country in the number of its beautiful hotels splendidly run and equipped. Especially is this true in New York City, and we have no doubt but that it leads all other cities of the world.

Notable among its hundreds of such structures is the NAVARRE HOTEL, admittedly one of the handsomest in the city, in French Renaissance style, of steel construction, with outer walls of stone and brick of light gray color, and red tiled roof, situated in the very center of everything one wishes to see.

Of the 350 rooms no two are decorated alike. Many compose elaborate suites and the appointments of all include telephones, electric lights, and every modern convenience. All have windows affording outside light and air, including the bathrooms.

With all this comfort, safety and luxury, entailing as it does an immense expense, the proprietors have inaugurated a rate never before attempted in this country. "A Room with a Bath for a Dollar and a Half." This announcement is so extraordinary that it is attracting widespread notice both in this country and abroad.

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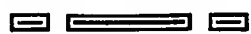
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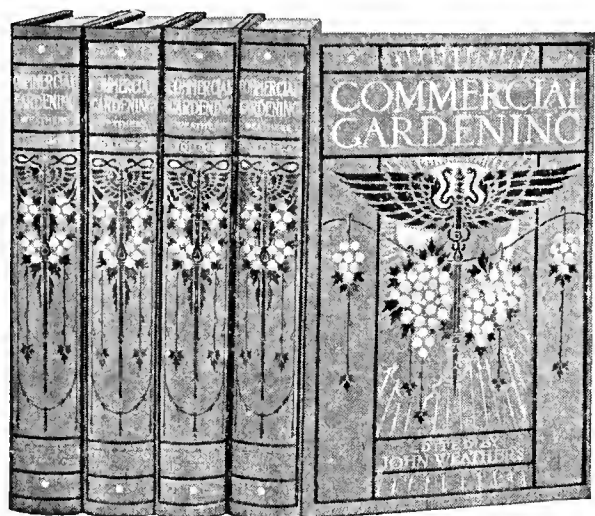
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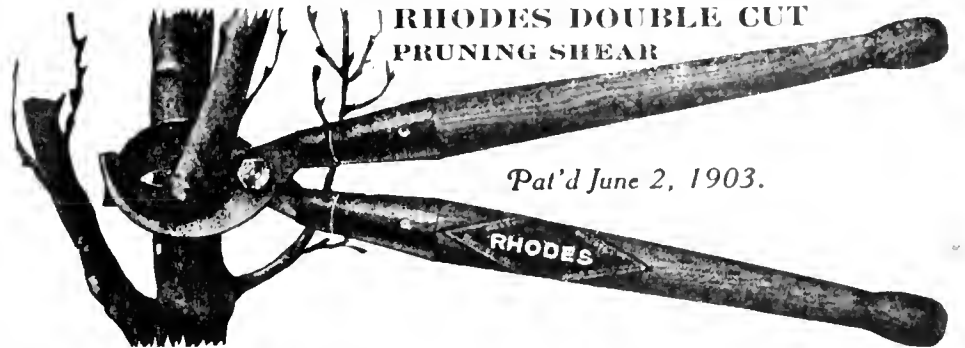
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EDITION OF 1913]

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**National Nurseryman Publishing Co.**

218 Livingston Bldg.

ROCHESTER, N. Y.

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A Magazine of Trade News and Cultural Information for the NURSEYMAN, FLORIST, EEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

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ESTABLISHED 1893

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INCORPORATED 1902

THE OFFICIAL ORGAN OF THE AMERICAN ASSOCIATION OF NURSERYMEN

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania to whom all correspondence pertaining to the Editorial Department, should be addressed.

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300 varieties of Conifers, 1 to 4 years old.  
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Export Exceeds 25,000,000  
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—SUCH AS—

Pears, Apples, Mahaleb, Maard, Myrobolan and Angers  
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MORE'N A MILLION SOLD THE TRADE THIS FALL

I still have for Spring delivery about 300,000 Black Raspberry tip plants in Kansas, Gregg, Cumberland and Plum Farmer; 25,000 Blower's Blackberry Sucker plants; 25,000 each of Golden Queen and St. Regis; 200,000 Early King, Cuthbert, Miller and Marlboro; Red Raspberry about 2,000; also about 20,000

Heavy Cuthberts, suitable for transplants. Also as fine Strawberry plants as ever grew. All plants sorted and put up in attractive bundles—there's none finer. Purity absolutely guaranteed. This and the fact that my prices are low and service prompt should appeal to the trade everywhere. So just

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**Order Your Trees Now**  
**We Will Trench for Spring Delivery**

## APPLE—2 Year Budded

	1 in.	6-7 ft.	5-6 ft.
A. G. Russett.....		$\frac{3}{4}$	$\frac{5}{8}$
Alexander.....	25	75	150
Baldwin.....	1000	1000	5000
Benoni.....		10	5
Ben Davis.....	250	2000	1000
Bismarck.....		15	20
Early Colton.....		25	12
C. R. June.....		20	25
Carthouse.....		25	50
Coffelt Beauty.....		25	25
Dominie.....	10	50	50
Early Harvest.....	125	500	500
Early Strawberry.....			25
Ensee.....		50	50
Fallawater.....	75	225	125
Fourth of July.....	25	250	250
Gano.....	250	1500	1250
Gravenstein.....	75	250	500
Grimes' Golden.....	10	20	75
Jeffries.....		25	25
Jonathan.....	200	2000	2000
King.....	25	400	250
Lankford.....		10	25
Lawver.....		15	10
Limbertwig.....		25	25
Longfield.....		90	60
Mann.....		25	2
Mo. Pippin.....	25	50	50
Myrick.....	25	50	25
Nero.....	125	400	250
N. W. Greening.....	125	500	250

## APPLES—2 Year Budded

	1 in.	6-7 ft.	5-6 ft.
P. W. Sweet.....	50	200	100
Pewaukee.....		25	10
Porter.....		50	
Rawles' Janet.....		25	50
Rambo.....	50	125	75
Red Astrachan.....	100	1250	1000
Rolfe.....		30	30
Rome Beauty.....	20	250	300
Salome.....		75	75
Scott's Winter.....		50	50
Smith's Cider.....	10	50	50
Spitzenburg.....		75	50
Springdale.....		50	50
Stark.....	75	250	125
Stayman's.....	600	10000	8000
Strawberry (Chenango).....		25	25
Sweet Bough.....	100	150	100
Tallman Sweet.....	75	200	200
Walbridge.....		40	10
Wealthy.....	50	400	1000
Winesap.....	50	2000	4000
Winter Banana.....	20	75	15
Wolf River.....	50	125	125
Yellow Transparent.....	500	3000	3000
Yellow Belleflower.....	15	50	15
York Imperial.....	2500	15000	20000

## CRAB APPLES

Golden Beauty.....	12	75	75
Hyslop.....		20	50
Martha.....		15	50
Transcendent.....	150	500	500

**We are also prepared to supply extra good 1-year budded apple trees of all the leading varieties**

## PEACHES—1 Year

	6-7 ft.	5-6 ft.	4-5 ft.	3-4 ft.
Belle of Georgia.....	400	2000	2000	1500
Carman.....	400	1000	2000	400
Chair's Choice.....	40	200	400	600
Crawford Late.....	200	1000	2500	4000
Elberta.....	2000	500	4000	5000
Yellow St. John.....	100	700	800	900

Other leading varieties of Peaches can be supplied from our Nurseries. Write for prices.

## STANDARD PEARS

	1 year	2 year
	5-6 ft. 4-5 ft. 3-4 ft. 2-3 ft. 1 in. 6-7 ft. 5-6 ft. 4-5 ft. 3-4 2-3	
Bartlett Pears ..	1000	1000
Kieffer .....	10000 10000 10000 2000 5000 5000	

Write for special prices on 2-year Kieffer Pears.

## DWARF PEARS

Bartlett .....	200 400	75 500 500
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## CHERRIES

Early Richmond....	250 1500 1000 300 100
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# THE NATIONAL NURSERYMAN



JANUARY, 1914

Published Monthly at Rochester, N. Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

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RHODODENDRONS, HEMLOCKS, WHITE PINES, BOX BUSH. A general collection of specimen ornamentals.

ALSO

NORWAY MAPLES, PIN OAKS, IBOTA PRIVET, SPIRAEA VAN HOUTTEI by the thousand.

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1500 Acres

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from European Nursery Centers

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in United States at the

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Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses, Vines and Plants, Grapes, Gooseberries, Small Fruits, Bulbs, Seeds, Palms and other tender Greenhouse Plants

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PEACH PLUM

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Own Root Roses

ORNAMENTAL TREES SHRUBS  
BERRIES CLEMATIS  
EVERGREENS PEONIES PHLOX  
PYRAMIDAL and STANDARD  
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete  
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W. & T. SMITH COMPANY  
GENEVA, N. Y.  
63 Years 700 Acres

Apple Seedling  
Japan and French Pear Seedling  
Apple Grafts Made to Order  
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Mulberry Seedling  
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Our Apple Trees are a clean, healthy lot,  
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We have a very fine stock of Althea, both  
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Berberis Japonica  
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Gardenias  
Magnolia Grandiflora  
Magnolia fuscata  
Azalea Indica  
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Ligustrums, in variety  
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Dwarf Box  
Privet, California and Amoor  
Citrus Trifoliata  
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### CLIMBERS

Ampelopsis quinquefolia  
Ampelopsis Veitchii  
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Wistaria, grafted, best sorts  
and budded  
Euonymus radicans  
English and Algerian Ivy  
Roses, field grown, own roots  
and budded

### DECIDUOUS SHRUBS

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Exochorda  
Philadelphus  
Spiraeas  
Styrax Japonica  
Deutzias  
Hydrangea, Otaksa, etc.  
Pomegranates  
Lilacs, best sorts, grafted  
Cercis, Japonica

### SHADE TREES

Elms  
Magnolia purpurea  
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Cercis canadensis  
Hackberry  
Salisburya  
Tulip Poplar  
Weeping Mulberry

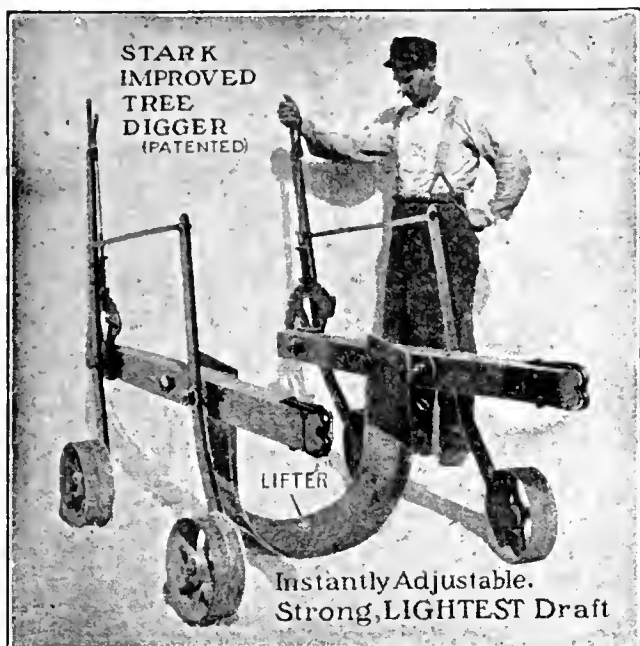
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Mulberries, grafted  
Figs  
Olives  
English Walnuts  
Peaches, never offered better  
stock  
Spanish Chestnuts  
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Established 1856 Over 450 Acres in Nursery

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Used and Recommended by Leading Nursermen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

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the best investment you can make—if you are looking toward permanent results and satisfied customers, as well as the first cost of the trees. We go to a great deal of trouble and expense gathering and sowing our seed, but we think it's worth it all to know that the little trees are true to name, and healthy and vigorous. Our customers, too, have found that it's worth the cost to know that they're getting *reliable* trees when they buy here. If you want the best evergreens you can get for your trade let us tell you more about those of "Hill Quality."

**THE D. HILL NURSERY CO., Inc.**

*Evergreen Specialists*

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# L. Spaeth

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Baumschulenweg  
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## Largest Nurseries in Europe

2000 ACRES

FOUNDED 1720

## HARDY TREES AND SHRUBS

1. Our Nurseries lie in a colder climate than the French, Dutch and English nurseries—
2. We grow all the stock we sell—
3. Moderate Prices.
- Catalogs free—
4. When in Europe come and see our nurseries—

Have you seen and examined the quality and finish of our

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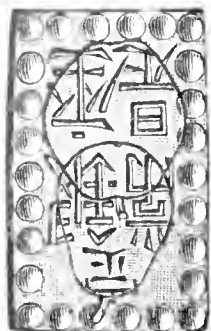
Send for samples and prices. Our reference are the largest nursery men in the United States.

## The Denney Tag Co.

West Chester, Pennsylvania



## Heikes—Huntsville—Trees



### Huntsville Wholesale Nurseries

Huntsville, Ala.

JESSIE S. MOSS, Prop.

We offer for Spring of 1914  
in large quantities as usual:

#### SPECIALTIES

- APPLES**—Commercial varieties, one and two year, in large supply. As fine in quality as ever grown.
- PEARS**—Kieffers, one and two years old. A much smaller crop than heretofore.
- CHERRIES**—On Mazzard. Two year, Bing, Lambert, Napoleon, Black Tartarian.
- CHERRIES**—On Mahaleb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.
- PEACHES**—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.
- ROSES**—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.
- PRIVET**—Amoor River (South). Retains its foliage longer and holds its color better than California Privet.
- PECAN SEEDLINGS**—Huntsville grown from selected nuts collected along the Gulf Coast. Thin shell.

See Price List for Particulars.

Address, **HUNTSVILLE WHOLESALE NURSERIES**  
HUNTSVILLE, ALA.,

GENERAL ASSORTMENT OF YOUNG OUT-DOOR

## Nursery Stock and Roses

Etc., Etc., ARE OUR SPECIALTIES

The Whole Nursery Trade Will be Interested by Reading

### OUR WHOLESALE CATALOGUE

CONCERNING PRINCIPALLY  
FRUIT TREE STOCKS,

YOUNG DECIDUOUS ORNAMENTAL TREES  
AND SHRUBS, YOUNG CONIFERS, NEW RARE  
OR NOTICEABLE TREES, SHRUBS, HARDY  
HERBACEOUS, Etc., Etc.

**ROSES.** One of the most extensive existing collections deliverable as dwarfs, on their own roots; grafted dog rose roots, dwarf budded on dog rose seedlings in all the best OLD and NEW varieties; also as STANDARDS.

Which will be send on Demand

An inspection of our Nurseries by Nurserymen visiting Orleans is cordially invited; it will be of interest principally in Summer.

JULES GOUCHAULT AND TURBAT NURSERIES,

**E. TURBAT & CO.** SUCCESSORS  
Orleans, France

TRADE STRICTLY WHOLESALE

## YELLOW BABY RAMBLER

The latest in roses and completing a wonderfully fine collection of Baby Roses, unsurpassed for bedding and hedging purposes. **Hardy Yellow Roses** are scarce; hardy everblooming yellows are scarcer still. This new variety is similar in all respects to the original Crimson Baby Rambler excepting color. We own and control the entire stock. The name is fully protected and colored plates, circulars, advertising matter can be supplied.

Write for prices for this season's delivery

## Jackson & Perkins Company

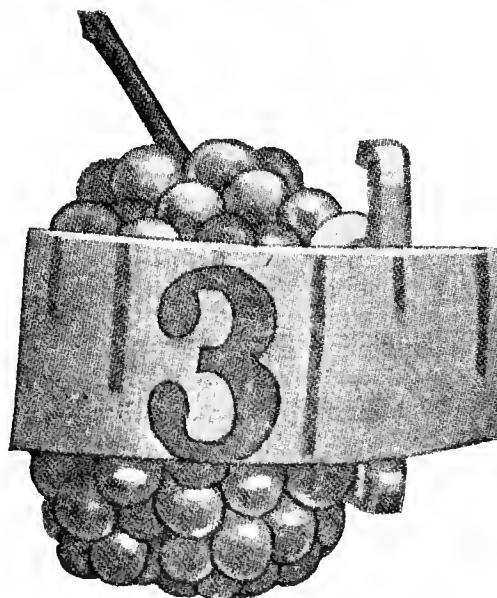
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## Our Great Macatawa Challenge Offer

I will pay \$1000 for two dozen plants of a better Blackberry than the Macatawa, judged on the following points: 1, size of berries; 2, hardiness of plant; 3, habit of growth of plant and fruit; 4, yield or average cropping; 5, flavor of berries; 6, freedom of berries from core or seeds; 7, ease in picking; 8, shipping quality of berries.

**Alfred Mitting, Holland, Mich.**  
Berry Specialist.



### Wonderful Vitality

Four out of the six "Macatawa" have started growth, which is satisfactory considering the roots were only packed in paper and sent this long distance.

Yours faithfully  
Tercy Fowler.

Shanghai, China,  
July 6, 1913

"The Macatawa Berry is 3½ inches one way  
by 3¾ inches the other."



Established 1820

# DEXTER GRAFTING TWINE

Especially Prepared for Nursery and  
Greenhouse Grafting

Put up in boxes containing 20 Balls. Also furnished on cones and tubes unbleached. This yarn is so wound that it can be readily soaked in hot wax and so twisted that it is strong to wrap without breaking, yet it is easily broken when the winding is completed.

We also make a special twine on tubes, balls and cones for the Reed Bell Graft Wrapping Machine. Samples and prices furnished on request.

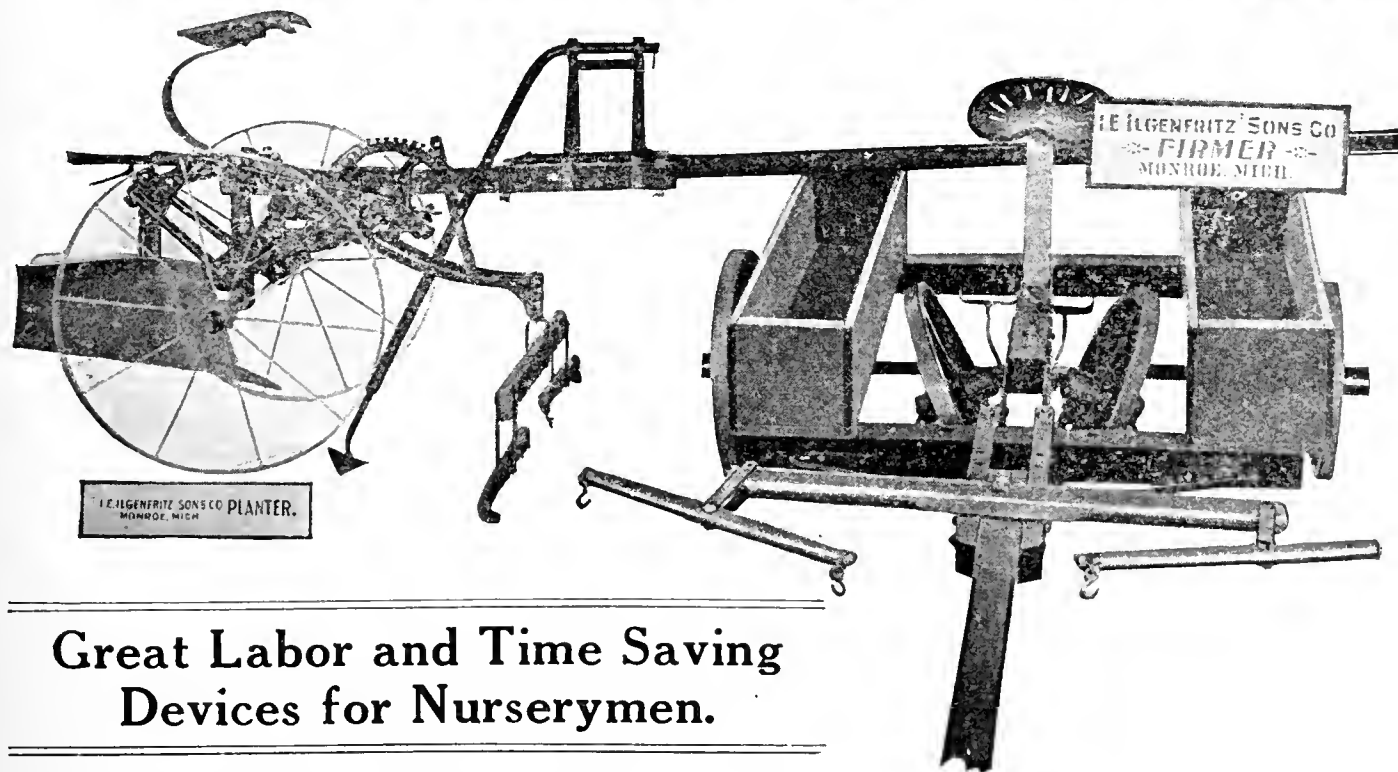
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## DEXTER YARN COMPANY

SOLE AGENTS

DeGRAFF & PALMER, 222 4th Ave., NEW YORK CITY

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BETTER  
AND MORE  
UNIFORM  
STANDS  
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GRAFTS  
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At Less Cost

Great Labor and Time Saving  
Devices for Nurserymen.

Write for descriptive circular with testimonials from leading nurserymen of 17 states of the Union.

If they can't get along without them can you?

TAKE THIS MATTER UP AT ONCE. Have machines for spring planting.

I. E. ILGENFRITZ' SONS CO.  
The Monroe Nursery, Monroe, Mich.

(See our other ad. this paper)

When writing to Advertisers please mention The National Nurseryman.

35TH YEAR

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WE OFFER A COMPLETE ASSORTMENT OF NURSERY STOCK CONSISTING OF

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Pear	Poplar Volga	Roses
Plum	Elm American	Evergreens
Cherry	Sycamores	California Privet
Peach	Mountain Ash	Buxus
Grape	Althea	Weeping Trees
Currant	Hydrangea	Catalpa Seedlings
Gooseberry	Barberries	Black Locust "
Small Fruits	Syringeas	Fruit Tree "
Maple Norway	Clematis	Catalpa Speciosa Seed.
Maple Schwedlers	Honey Suckle	Etc., Etc., Etc.
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Our stock is well grown and graded. Prices are such that it will pay to investigate. Come and see us or write.

**J. K. HENBY & SON**  
GREENFIELD, IND.

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equal to any  
on the market

Small Fruit Plants our specialty for 25 years. 100,000 Transplanted Raspberry, Blackberry and Dewberry plants, fine for critical retail trade.

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For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

**Dayton Fruit Tree Label Co.**  
South Canal St., Dayton, Ohio

## Evergreen Seedlings and Transplants

FALL OR SPRING  
DELIVERY

LET US QUOTE YOU ON  
**TREE SEEDS**

**The North-Eastern Forestry Co.**  
"WE RAISE OUR OWN TREES"

New Haven, Conn.

NURSERY AT  
Cheshire, Ct.

SEEDHOUSE AT  
Willsboro, N. Y.

## The Framingham Nurseries

200 Acres  
High Grade  
Trees, Shrubs,  
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Vines, Roses,  
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Fine Stock  
of  
Rhododendrons  
Kalmias  
and  
Andromedas

Send for Price List

**W. B. WHITTIER & CO.**  
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## Fumigation with Hydrocyanic Acid Gas Generated From Cyanide <sup>98%</sup>/<sub>99%</sub>

Is the only positive eradicator of San Jose Scale and other Insect Pests. Endorsed by all agricultural experiment stations.

Manufactured by

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## We Offer for Spring 1914 Norway Maple Silver Maple and Carolina Poplar

IN CAR LOTS ALL SIZES  
GET OUR PRICES

**The Greenbrier Nursery Co., Inc.**  
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FRUIT AND SEED FARMS  
OFFER for Spring 1914

GRAPE VINES—One and two years old. Varieties largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all recleaned and guaranteed first class.

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For Spring 1914

Grape Vines, Currants and Gooseberries  
in all varieties and grades

—also—

Grape and Currant Cuttings and Light  
Grade of Vines for Lining Out  
in Nursery Rows

WRITE FOR PRICES

F. E. SCHIFFERLI, Fredonia, N. Y.

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VINCENNES, IND.

W. C. Reed, Prop.

We are pleased to offer for Spring 1914:

CHERRY—Two Year. All leading sour varieties.

CHERRY—One Year. General list leading sorts sour and  
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PEACH—One Year. 30 varieties.

APPLE—Two Year. All grades.

APPLE—One Year. Cut Backs very strong.

SILVER MAPLE. All grades.

Can furnish the above in Carload Lots or less. Also  
Pear, Plum, Quince, Compass Cherry, Currants, Gooseberry,  
Catalpa Speciosa and ornamentals in good assortment.

Please submit list of wants for prices. Personal  
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We are now ready to quote lowest prices on

**FRUIT, SHADE AND ORNAMENTAL  
TREES, SHRUBS, EVERGREENS,  
VINES and HERBACEOUS  
PLANTS**

FOREST TREE SEEDLINGS we only have in limited  
supply this season, and would advise placing your orders  
early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade  
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**"Everything for the Nurseryman"**

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All kinds. Plate Books, Folios, Maps, Cards,  
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Offer to the Trade

APPLE, Peach, Pear, Plum and Cherry Trees,  
APPLE SEEDLINGS, Apple Scions, Forest  
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ASH, BOX ELDER, ELM, SOFT MAPLE, MULBERRY  
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Large Stock of Shade Trees

Any Style of APPLE GRAFTS Made to Order

Write for Prices

**V.G.'S VERY GOOD**  
HARDY NURSERY STOCK SUCH AS  
AZALEAS, BUXUS,

CONIFERS, EVERGREENS,  
PAEONIAS, MAGNOLIAS, RHODODENDRONS,  
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Offered by

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Wholesale Nurseries

Ask for Catalogue

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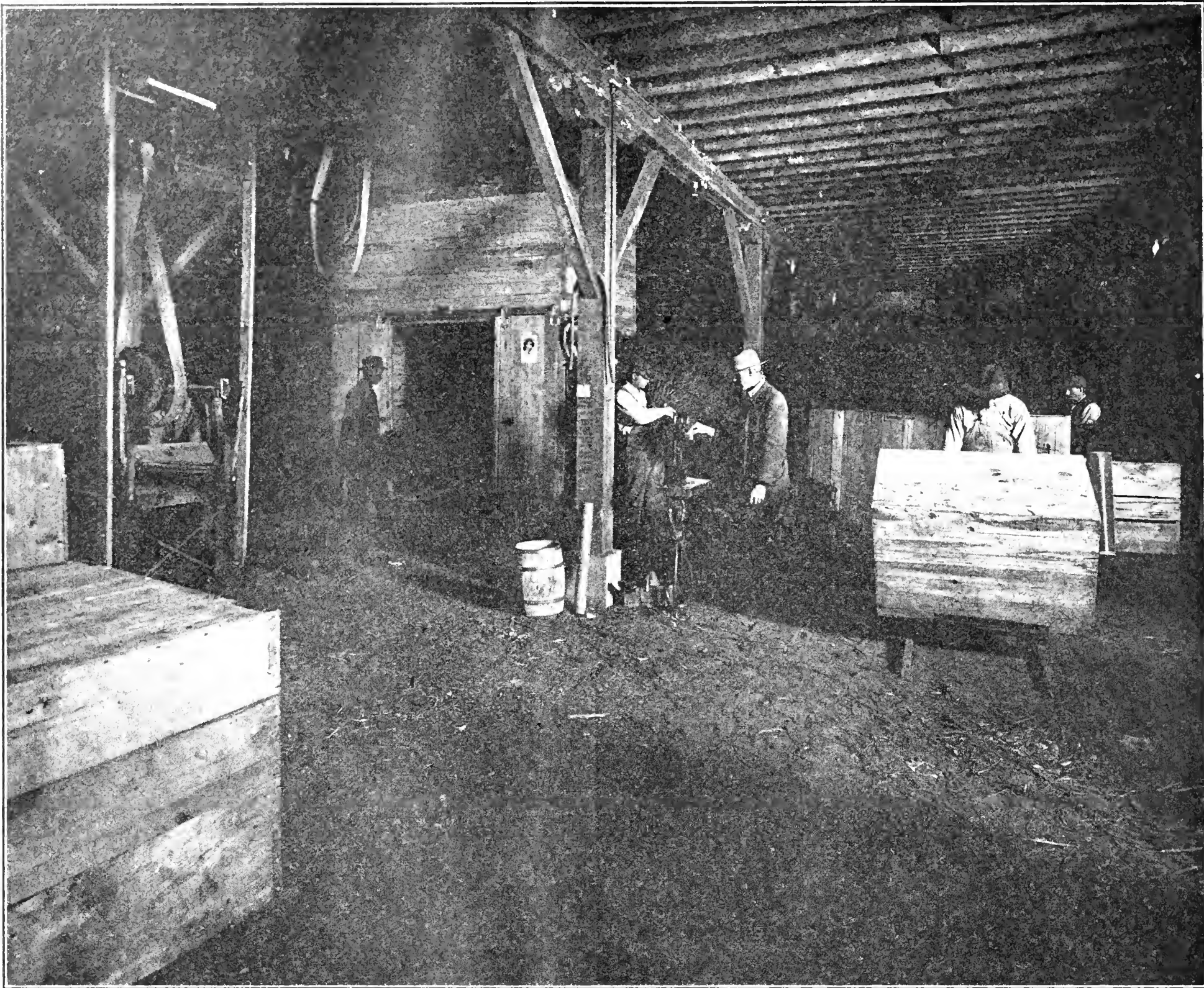
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Here is where the Apple Seedlings are separated into the different grades. The seedlings are brought up in the elevator from the damp storage room below—leaves and dirt are shaken from the bunches. The seedlings are then separated into the six different grades--counted--tied--and returned to the storage room in less than an hour. This quick handling prevents drying out or loss of vitality.

We can furnish you Apple Seedlings all grades for immediate shipment. We can ship safely during the winter in refrigerator cars.

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Apple and Pear Seedling Specialists.

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